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=> fil reg
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STRUCTURE FILE UPDATES:   28 JUN 2010  HIGHEST RN 1228532-15-7
DICTIONARY FILE UPDATES:  28 JUN 2010  HIGHEST RN 1228532-15-7

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http://www.cas.org/support/stngen/stndoc/properties.html

=> d que
L3            1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  1306-06-5/RN
L4            1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  21063-37-6/RN
L5        27167 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L3
L6          221 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L4
L7          132 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L5 AND L6
L9           10 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L7 AND DISPERS?
L10             QUE  SPE=ON  ABB=ON  PLU=ON  MU OR MICRON OR MICROMETER
                OR MICRO(W)METER OR NANOMETER OR NANO(W)METER OR  NM OR M
                M
L11          24 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L7 AND L10
L12          30 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L9 OR L11
L13             QUE  SPE=ON  ABB=ON  PLU=ON  PLATELET? OR PLATE# OR PLATE
                 LIKE# OR GRAIN# OR GRANULAR# OR RECTANGULAR#
L14          17 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L7 AND L13
L15          54 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L7 AND CRYSTAL?
L16          14 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L15 AND L10
L17           1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  14567-92-1/RN
L18           4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  APATITE/CN
L19         908 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L17
L20       30990 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L18
L21         185 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  (L19 OR L20) AND
                L6
L22          21 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L21 AND L13
L23           8 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L22 AND L10
L24           3 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L22 AND LENGTH?
L25           8 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L22 AND SIZE#
L26           4 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L22 AND DISPERS?
L27          39 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L12 OR L14 OR L16
                OR (L23 OR L24 OR L25 OR L26)
L28           3 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L27 AND CPS/RL
L29           5 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L7 AND CPS/RL
L30             QUE  SPE=ON  ABB=ON  PLU=ON  PARTICL? OR MICROPARTICL? OR
```

		PARTICULAT? OR DUST? OR GRIT? OR GRAIN# OR GRANUL? OR PO WDER? OR SOOT? OR SMUT? OR FINES# OR PRILL? OR FLAKE# OR PELLET
L34		QUE SPE=ON ABB=ON PLU=ON HYDROXYLAPATITE# OR CALCIUM DIHYDROGEN PHOSPHATE# OR CALCIUM HYDROGEN PHOSPHATE# OR TRICALCIUM PHOSPHATE# OR HYDROXYAPATITE# OR MONETITE# OR CAHPO4 OR APATITE# OR BRUSHITE#
L35	93	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L34 AND AQUEOUS DISPERS?
L36	43	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35 AND L10
L37	19	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36 AND (LENGTH? OR SIZE#)
L38	10	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L37 AND ((L5 OR L6) OR (L19 OR L20))
L39	19	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L37 OR L38)
L40	19	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L39 AND L30
L42	6752	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON ((L5 OR L6) OR (L19 OR L20)) AND (CALCIUM PHOSPHATE# OR CALCIUMPHOSPHATE#)
L43	1414	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42 AND L10
L44	876	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L43 AND (L13 OR L30)
L46	121	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L44 AND DISPERS?
L47	86	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L46 AND (LENGTH? OR SIZE#)
L48	42	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L47 AND (1840-2003)/PRY,AY,PY
L50	16	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L48 AND PROC/RL
L52	23	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND PROC/RL
L53	25	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L28 OR L29 OR L52
L54	11	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L53 AND (1840-2003)/PRY,AY,PY
L55	17	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L40 AND (1840-2003)/PRY,AY,PY
L56	40	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L50 OR L54 OR L55
L58	14	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L48 AND PEP/RL
L59	40	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L56 OR L58
L60	36	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L59 AND L10
L61	33	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L59 AND L30
L62	12	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L59 AND L13
L63	34	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L59 AND (LENGTH? OR SIZE#)
L64	40	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L59 OR L60 OR L61 OR L62 OR L63)

=> fil hcap
FILE 'HCAPLUS' ENTERED AT 08:48:34 ON 30 JUN 2010
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FILE COVERS 1907 - 30 Jun 2010 VOL 153 ISS 1
FILE LAST UPDATED: 29 Jun 2010 (20100629/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 164 1-40 ibib ed abs hitstr hitind

L64 ANSWER 1 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:259854 HCAPLUS Full-text
DOCUMENT NUMBER: 142:303682
TITLE: Fine grain having fat-soluble drug encapsulated therein, process for producing the same and preparation containing the same
INVENTOR(S): Mizushima, Yutaka; Ishihara, Tsutomu; Shimada, Emi
PATENT ASSIGNEE(S): LTT Bio-Pharma Co., Ltd., Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005025542	A1	20050324	WO 2004-JP13418 <--	20040915
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2007001865	A	20070111	JP 2003-323287 <--	20030916
PRIORITY APPLN. INFO.:			JP 2003-323287 <--	A 20030916

ED Entered STN: 25 Mar 2005
AB It is intended to provide a fine grain having a fat-soluble drug encapsulated therein, in which a biodegradable and porous inorg. fine grain (in particular,

a biodegradable and porous hydroxyapatite) is employed as a carrier and which can exert a favorable absorbability in vivo by parenteral administration (for example, injection) or oral administration; a process for producing the same; and a preparation containing the same. Namely, a fine grain having a fat-soluble drug encapsulated therein, characterized in that the fat-soluble drug is encapsulated in a fine grain being made of porous hydroxyapatite and having an average grain size of from 1 to 20 μm. By dispersing such fine grains by using a dispersion agent such as hydroxymethylcellulose sodium (CMC), an injection usable in i.v., s.c. or i.m. administration, which shows an excellent absorbability in vivo, can be obtained. Thus, testosterone enanthate-encapsulated porous hydroxyapatite particle was prepared, and tested for its sustained-release in mice after injection.

IT 1306-06-5, Hydroxyapatite
(hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI A61K0009-14 [ICM,7]; A61K0009-16 [ICS,7]; A61K0009-20 [ICS,7]; A61K0009-48 [ICS,7]; A61K0047-02 [ICS,7]; A61K0047-38 [ICS,7]; A61K0047-34 [ICS,7]; A61K0031-192 [ICS,7]; A61K0031-185 [ICS,7,C*]; A61K0031-337 [ICS,7]; A61K0031-4184 [ICS,7]; A61K0031-4164 [ICS,7,C*]; A61K0031-436 [ICS,7]; A61K0031-4353 [ICS,7,C*]; A61K0031-4422 [ICS,7]; A61K0031-4745 [ICS,7]; A61K0031-4738 [ICS,7,C*]; A61K0031-522 [ICS,7]; A61K0031-519 [ICS,7,C*]; A61K0031-5513 [ICS,7]; A61K0031-551 [ICS,7,C*]; A61K0031-565 [ICS,7]; A61K0031-568 [ICS,7]; A61K0031-573 [ICS,7]; A61K0031-57 [ICS,7,C*]

IPCR A61K0009-14 [I,C*]; A61K0009-14 [I,A]; A61K0031-185 [I,C*]; A61K0031-192 [I,A]; A61K0031-337 [I,C*]; A61K0031-337 [I,A]; A61K0031-4164 [I,C*]; A61K0031-4184 [I,A]; A61K0031-4353 [I,C*]; A61K0031-436 [I,A]; A61K0031-4422 [I,C*]; A61K0031-4422 [I,A]; A61K0031-4738 [I,C*]; A61K0031-4745 [I,A]; A61K0031-519 [I,C*]; A61K0031-522 [I,A]; A61K0031-551 [I,C*]; A61K0031-5513 [I,A]; A61K0031-565 [I,C*]; A61K0031-565 [I,A]; A61K0031-568 [I,C*]; A61K0031-568 [I,A]; A61K0031-57 [I,C*]; A61K0031-573 [I,A]

CC 63-6 (Pharmaceuticals)

ST hydroxyapatite porous particle fat sol drug delivery

IT Drug delivery systems
(capsules, enteric-coated; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)

IT Drug delivery systems
(capsules; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)

IT Vitamins
(fat-soluble; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)

IT Drug delivery systems
(granules, enteric-coated; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)

IT Drug delivery systems
(granules; hydroxyapatite fine grain having

fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(injections; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Surfactants
(nonionic, dispersing agents; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(oral; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(powders; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Hormones, animal, biological studies
(steroid; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(sustained-release; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(tablets, enteric-coated; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(tablets; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT Drug delivery systems
(topical; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT 9004-32-4, Carboxymethylcellulose sodium
(dispersing agents; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT 315-37-7, Testosterone enanthate
(hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT 10103-46-5, Calcium phosphate
(hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT 50-28-2, Estradiol, biological studies 50-50-0, Estradiol benzoate 50-53-3, Chlorpromazine, biological studies 52-21-1, Prednisolone acetate 57-85-2, Testosterone propionate 58-22-0, Testosterone 59-05-2, Methotrexate 389-08-2, Nalidixic acid 439-14-5, Diazepam 979-32-8, Estradiol valerate 1177-87-3, Dexamethasone acetate 1306-06-5, Hydroxyapatite 2152-44-5, Betamethasone valerate 5593-20-4, Betamethasone dipropionate 15663-27-1, Cisplatin 17902-23-7, Tegafur 21829-25-4, Nifedipine 22071-15-4, Ketoprofen 23214-92-8, Doxorubicin (33069-62-4, Paclitaxel 54527-84-3, Nicardipine hydrochloride 59277-89-3, Aciclovir 61422-45-5, Carmofur 70458-96-7, Norfloxacin 78110-38-0, Aztreonam 79217-60-0, Cyclosporin 81103-11-9, Clarithromycin 82419-36-1, Ofloxacin 91832-40-5, Cefdinir 100286-90-6, Irinotecan hydrochloride 104987-11-3, Tacrolimus 111470-99-6, Amlodipine besylate 145040-37-5, Candesartan cilexetil
(hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
IT 60-29-7, Ethyl ether, uses 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-64-1, Acetone, uses 71-23-8, Propanol, uses 71-36-3, Butyl alcohol, uses 141-78-6, Ethyl acetate, uses

(solvents; hydroxyapatite fine grain having fat-soluble drug encapsulated therein, and process for producing same)
REFERENCE COUNT: 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 2 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:600 HCAPLUS Full-text
DOCUMENT NUMBER: 142:59290
TITLE: Preparation of calcium phosphate particles
INVENTOR(S): Chane, Ching Jean Yves; Boissiere, Cedric; Mann, Stephen
PATENT ASSIGNEE(S): Rhodia Chimie, Fr.
SOURCE: Fr. Demande, 15 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2856673	A1	20041231	FR 2003-7880 <--	20030630
WO 2005003028	A2	20050113	WO 2004-FR1666 <--	20040629
WO 2005003028	A3	20050623		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: FR 2003-7880 A 20030630 <--

ED Entered STN: 31 Dec 2004
AB Plate-like particles of calcium phosphate having monetite structure are produced having a thickness of 0.005-0.2 μm, a pore volume (measured with Hg) of ≥ 0.30 mL/g, a median diameter d50 of 5-15 μm, and a sp. surface area of 20-50 m2/g. Fibrous particles of calcium phosphate having an apatite structure are produced having a pore volume of ≥ 0.5 mL/g, a sp. surface area of ≥ 150 m2/g, and a median diameter d50 of 5-15 μm. The calcium phosphate is prepared by reacting a calcium salt, at least one calcium-complexing agent, a phosphate salt, and at least one polymer at a pH of < 3.5 resulting in a precipitate which is separated and washed. The calcium salt can be calcium chloride or calcium nitrate. The calcium-complexing agent can be malonic acid or maleic acid. The phosphate salt can be an ammonium or sodium salt of phosphoric acid. The polymer has carboxylate, phosphate, or phosphonate functional groups, such as polyaspartic acid, polyglutamic acid, polylysine, polyglycine, casein, homopolymers or copolymers of acrylic acid or methacrylic acid, polysaccharides, or peptides with phosphate functional groups. The produced calcium phosphate can be used in heat insulating materials, as pharmaceutical excipient, polishing agent, support agent, in building

materials, as additive for oral formulations, in particular toothpastes, or as encapsulation agent.

IT 1306-06-5P, Hydroxylapatite 21063-37-6P, Monetite
(preparation of calcium phosphate particles)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 21063-37-6 HCAPLUS

CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

● Ca

IPCI C01B0025-32 [ICM,7]; C01B0025-00 [ICM,7,C*]; C04B0016-00 [ICS,7]; A61K0009-10 [ICS,7]; A61K0007-16 [ICS,7]; A61K0047-02 [ICS,7]

IPCR C01B0025-00 [I,C*]; C01B0025-32 [I,A]

CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 58, 63

IT Acrylic polymers, uses
Caseins, uses
Phosphopeptides
Polysaccharides, uses
(preparation of calcium phosphate particles)

IT 1306-06-5P, Hydroxylapatite 21063-37-6P, Monetite
(preparation of calcium phosphate particles)

IT 110-16-7, Maleic acid, processes 141-82-2, Propanedioic acid, processes 1336-21-6, Ammonium hydroxide
(preparation of calcium phosphate particles)

IT 7558-80-7 7664-38-2D, Phosphoric acid, ammonium or sodium salt 10035-04-8, Calcium chloride dihydrate 10124-37-5, Calcium nitrate
(preparation of calcium phosphate particles)

IT 25104-18-1, Polylysine 25513-46-6, Polyglutamic acid 25608-40-6, Polyaspartic acid 25718-94-9, Polyglycine 34345-47-6, Polyaspartic acid, sodium salt
(preparation of calcium phosphate particles)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 3 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:599 HCAPLUS Full-text

DOCUMENT NUMBER: 142:59289

TITLE: Colloidal dispersions of plate -like calcium phosphate

INVENTOR(S): Chane, Ching Jean Yves; Lebugle, Albert

PATENT ASSIGNEE(S): Rhodia Chimie, Fr.; Centre National de la Recherche Scientifique CNRS

SOURCE: Fr. Demande, 17 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2856672	A1	20041231	FR 2003-7878 <--	20030630
CA 2531045	A1	20050113	CA 2004-2531045 <--	20040628
WO 2005003027	A2	20050113	WO 2004-FR1645 <--	20040628
WO 2005003027	A3	20050609		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1651564	A2	20060503	EP 2004-767491 <--	20040628
EP 1651564	B1	20080521		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
AT 396147	T	20080615	AT 2004-767491 <--	20040628
MX 2006000116	A	20061009	MX 2006-116 <--	20060105
US 20060239884	A1	20061026	US 2006-562526 <--	20060519
PRIORITY APPLN. INFO.:			FR 2003-7878 A <--	20030630
			WO 2004-FR1645 W	20040628

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 31 Dec 2004

AB Colloidal dispersions of plate-like calcium phosphate are prepared with plates having a length of 250-800 nm and a thickness of 1-40 nm. The calcium phosphate can have a monetite, apatite, or brushite structure. The calcium phosphate plates prepared by adding a solution of (NH4)2(HPO4) or (NH4)(H2PO4) to a solution containing a calcium salt, especially CaCl2 or Ca(NO3)2 at a pH of 4-6, heating the obtained dispersion at 60-90°, adjusting the pH of the dispersion to 8-9.5, and separating the formed calcium phosphate plates. A dispersion is obtained by preparing a suspension of the calcium phosphate plates in the presence of a dispersant. The calcium phosphate or its

dispersions can be used as polishing agents, construction materials, additives for toothpaste, or encapsulation agent.

IT 1306-06-5P, Hydroxylapatite 14567-92-1P, Brushite 21063-37-6P, Monetite (colloidal dispersion of calcium phosphate plates)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 14567-92-1 HCAPLUS

CN Brushite (Ca(HPO4).2H2O) (9CI) (CA INDEX NAME)

RN 21063-37-6 HCAPLUS

CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

IPCI C01B0025-32 [ICM,7]; C01B0025-00 [ICM,7,C*]; C04B0016-00 [ICS,7]; A61K0009-10 [ICS,7]; A61K0007-16 [ICS,7]; A61K0047-02 [ICS,7]

IPCR A61K0008-04 [I,C*]; A61K0008-04 [I,A]; A61K0008-19 [I,C*]; A61K0008-24 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A]; C01B0025-00 [I,C*]; C01B0025-32 [I,A]

CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 58, 63

ST calcium phosphate colloidal dispersion plate

IT Colloids
Dispersion (of materials)

(colloidal dispersion of calcium phosphate plates)
IT 1306-06-5P, Hydroxylapatite 14567-92-1P, Brushite 21063-37-6P, Monetite
(colloidal dispersion of calcium phosphate plates)
IT 7783-28-0 10035-04-8, Calcium chloride dihydrate
(colloidal dispersion of calcium phosphate plates)
IT 7758-29-4, Sodium tripolyphosphate
(dispersant; colloidal dispersion of calcium phosphate plates)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 4 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:592 HCAPLUS Full-text
DOCUMENT NUMBER: 142:59288
TITLE: Preparation of colloidal dispersion of plate-like calcium phosphate
INVENTOR(S): Chane, Ching Jean Yves
PATENT ASSIGNEE(S): Rhodia Chimie, Fr.
SOURCE: Fr. Demande, 16 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2856608	A1	20041231	FR 2003-7879 <--	20030630
FR 2856608	B1	20051118		
CA 2530562	A1	20050113	CA 2004-2530562 <--	20040628
CA 2530562	C	20091124		
WO 2005002720	A2	20050113	WO 2004-FR1647 <--	20040628
WO 2005002720	A3	20050317		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1651340	A2	20060503	EP 2004-767493 <--	20040628
EP 1651340	B1	20091223		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
AT 452701	T	20100115	AT 2004-767493	20040628

			<--		
MX 2006000115	A	20061009	MX 2006-115		20060105
			<--		
US 20070179202	A1	20070802	US 2006-563167		20060525
			<--		
PRIORITY APPLN. INFO.:			FR 2003-7879	A	20030630
			<--		
			WO 2004-FR1647	W	20040628

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 31 Dec 2004

AB Colloidal dispersion of plate-like calcium phosphate containing at least one Ca-complexing polymer are prepared The plate-like crystals have a length of 5-500 nm and a thickness of 0.5-20 nm. The produced calcium phosphate has a monetite or apatite structure. The Ca-complexing polymer can be polyaspartic acid, polyglutamic acid, polylysine, polyglycine, homopolymers or copolymers of acrylic acid or methacrylic acid, polyacrylic acid-polyacrylamide, polysaccharides which can be modified with guar, CM-cellulose, xanthan gum, or polysaccharides modified with phosphate or phosphonate functions, or peptides containing phosphate groups. A dispersant, especially sodium tripolyphosphate, is added to the dispersion. The dispersion is prepared by adding a solution of (NH4)2(HPO4) or (NH4)(H2PO4) and a calcium-complexing polymer to a solution containing a calcium salt, especially CaCl2 or Ca(NO3)2, having a pH of 4-6, heating the obtained dispersion to 60-90°, washing the dispersion, adding a dispersant, and separating the colloidal dispersion. The colloidal dispersions can be used as food additives, heat insulators, pharmaceutical excipient, agent for oral formulations, in particular toothpastes, or encapsulation agents.

IT 1306-06-5P, Apatite 21063-37-6P, Monetite
(preparation of colloidal dispersion of plate-like calcium phosphate)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 21063-37-6 HCAPLUS

CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

● Ca

IPCI B01J0013-00 [ICM,7]; B01F0017-14 [ICS,7]; C01B0025-32 [ICS,7]; C01B0025-00 [ICS,7,C*]; C04B0016-00 [ICS,7]; A61K0009-10 [ICS,7]; A61K0047-02 [ICS,7]; A61K0007-16 [ICS,7]

IPCR B01F0017-30 [I,C*]; B01F0017-30 [I,A]; B01J0013-00 [I,C*]; B01J0013-00

[I,A]; C01B0025-00 [I,C*]; C01B0025-32 [I,A]
CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 17, 62, 63
ST colloidal dispersion calcium phosphate plate dispersant calcium complexing polymer
IT Colloids
Dispersion (of materials)
Food additives
(preparation of colloidal dispersion of plate-like calcium phosphate)
IT Acrylic polymers, uses
Phosphopeptides
Polysaccharides, uses
(preparation of colloidal dispersion of plate-like calcium phosphate)
IT 7758-29-4, Sodium tripolyphosphate
(dispersant; preparation of colloidal dispersion of plate-like calcium phosphate)
IT 1306-06-5P, Apatite 21063-37-6P, Monetite
(preparation of colloidal dispersion of plate-like calcium phosphate)
IT 1336-21-6, Ammonium hydroxide
(preparation of colloidal dispersion of plate-like calcium phosphate)
IT 7783-28-0 10035-04-8, Calcium chloride dihydrate 10124-37-5, Calcium nitrate (Ca(NO3)2)
(preparation of colloidal dispersion of plate-like calcium phosphate)
IT 9003-06-9, Acrylamide-acrylic acid copolymer 25104-18-1, Polylysine 25513-46-6, Polyglutamic acid 25718-94-9, Polyglycine 34345-47-6, Polyaspartic acid, sodium salt
(preparation of colloidal dispersion of plate-like calcium phosphate)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 5 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:905973 HCAPLUS Full-text
DOCUMENT NUMBER: 141:367557
TITLE: Method for surface treatment of paper
INVENTOR(S): Wiese, Harm; Kroener, Hubertus
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092481	A2	20041028	WO 2004-EP3956 <--	20040414
WO 2004092481	A3	20050609		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,

KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10318066	A1	20041111	DE 2003-10318066 <--		20030417
AU 2004231028	A1	20041028	AU 2004-231028 <--		20040414
AU 2004231028	B2	20090604			
CA 2522620	A1	20041028	CA 2004-2522620 <--		20040414
EP 1618254	A2	20060125	EP 2004-727277 <--		20040414

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR

BR 2004009416	A	20060425	BR 2004-9416 <--		20040414
CN 1791722	A	20060621	CN 2004-80013512 <--		20040414
JP 2006523783	T	20061019	JP 2006-505126 <--		20040414
US 20060191653	A1	20060831	US 2005-553075 <--		20051012
PRIORITY APPLN. INFO.:			DE 2003-10318066	A	20030417
			<--		
			WO 2004-EP3956	W	20040414

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 29 Oct 2004

AB The (crude) paper surface is coated with an aqueous dispersion of composite particles comprising a polyacrylate and a fine-particulated inorg. solid of average particle size ≤100 nm with 0.1-100 g/m2. The surface-treated paper may be used for printing processes (flexog., offset, gravure). Thus, the dispersion was prepared under N and stirring at 25° and 1 bar from 416.6 g Nyacol 2040, 2.5 g methacrylic acid, 12 g 10% NaOH, 10.4 g 20% Lutensol AT18 and 0.83 g CTAB in 200 g H2O. The dispersion was warmed to 80° and sep. fed within 5 min with (I) 21.1 g from a mixture of 117.5 g Me methacrylate, 130 g Bu acrylate and 0.5 g methacryl oxypropyl trimethoxysilane, and fed (II) 57.1 g initiator solution from 2.5 g sodium peroxydisulfate, 11.5 g 10% NaOH solution and 100 g deionized H2O, then stirred for a further hour at reaction temperature After addition of 0.92 g 45% aqueous Dowfax 2A1 the residual amts. of I and II were added. The paper treated with the inventive dispersion showed an increased value in dry and wet surface bonding strength (71 cm/s and 57%), compared with 63 cm/s and 51%.

IT 1306-06-5, Hydroxy apatite
(fine-particulated inorg. solid; method for surface treatment of paper)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9

O4P | 3 | 14265-44-2
Ca | 5 | 7440-70-2

IPCI D21H [ICM,7]
IPCR B23Q0039-00 [I,C*]; B23Q0039-02 [I,A]; B25J0015-00 [I,C*]; B25J0015-00 [I,A]; B41M0005-00 [N,C*]; B41M0005-00 [N,A]; B41M0005-50 [I,C*]; B41M0005-52 [I,A]; D21H0019-00 [I,C*]; D21H0019-42 [I,A]; D21H0019-56 [I,A]; D21H0021-00 [I,C*]; D21H0021-52 [I,A]
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 37, 42
ST radical emulsion polymn acrylate; acrylate contg particulated silica dispersion paper coating; improving surface bonding strength paper coating compn
IT 7631-86-9, Nyacol 2040, uses
(colloidal, fine-particulated inorg. solid; method for surface treatment of paper)
IT 471-34-1, Calcium carbonate, uses 546-93-0, Magnesium carbonate 1306-06-5, Hydroxy apatite 1306-38-3, Cerium dioxide, uses 1309-37-1, Iron(III) oxide, uses 1314-13-2, Zinc oxide, uses 1314-36-9, Yttrium (III)oxide, uses 1314-98-3, Zinc sulfide, uses 1317-61-9, Iron oxide, uses 1344-28-1, Aluminum oxide, uses 1345-25-1, Iron(II) oxide, uses 7758-87-4, Calcium orthophosphate 10043-83-1, Magnesium orthophosphate 13463-67-7, Titanium dioxide, uses 18282-10-5, Tin dioxide 24623-77-6, Aluminum hydroxide oxide (Al(OH)O)
(fine-particulated inorg. solid; method for surface treatment of paper)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 6 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:697605 HCAPLUS Full-text
DOCUMENT NUMBER: 141:212825
TITLE: Spherical composite particles containing calcium compounds and glycosaminoglycans, and their manufacture
INVENTOR(S): Ikoma, Toshiyuki; Tanaka, Junzo
PATENT ASSIGNEE(S): National Institute for Research in Inorganic Materials, Japan; National Institute of Materials Science
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004236895	A	20040826	JP 2003-30142 <--	20030206
JP 3692404	B2	20050907		
PRIORITY APPLN. INFO.:			JP 2003-30142 <--	20030206

ED Entered STN: 26 Aug 2004
AB Spherical composite particles (diameter 0.1-100 .mu .m), useful for bone implants, chromatog. materials, etc., are manufactured by mixing aqueous

glycosaminoglycan dispersions with aqueous solns. containing Ca compds. and optionally other metal ions, and spraying the mixts. at 130-200°. Ca phosphate was added dropwise to a suspension containing Ca(OH)2 and chondroitin sulfate, and the resulting suspension (pH 8) was spray-dried at 150° to give spherical composite particles having particle size 1-50 μm.

IT 1306-06-5, Hydroxyapatite
(manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI A61L0027-00 [ICM,7]

IPCR A61L0027-00 [I,A]; A61L0027-00 [I,C*]

CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 9

ST calcium glycosaminoglycan spherical particle spray drying; bone implant calcium glycosaminoglycan spherical particle; chondroitin sulfate calcium phosphate bone implant

IT Bone
(artificial; manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

IT Prosthetic materials and Prosthetics
(manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

IT Apatite-group minerals
Glycosaminoglycans, biological studies
Metals, biological studies
(manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

IT Acids, biological studies
(organic, calcium salts; manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

IT Drying
(spray; manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

IT 471-34-1, Calcium carbonate, biological studies 1305-62-0, Calcium hydroxide, biological studies 1306-06-5, Hydroxyapatite 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-98-7, Molybdenum, biological studies 7440-06-4, Platinum, biological studies 7440-22-4, Silver, biological studies 7440-50-8, Copper, biological studies 7440-57-5, Gold, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7440-70-2D, Calcium, organic acid salts 7646-85-7, Zinc chloride, biological studies 9004-61-9, Hyaluronic acid 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate 9050-30-0, Heparan sulfate 9056-36-4, Keratan sulfate 10043-52-4, Calcium chloride, biological studies 10103-46-5, Calcium phosphate 24967-94-0, Dermatan sulfate 55326-60-8, Carbonate apatite
(manufacture of spherical composite particles containing calcium compds., glycosaminoglycans, and optionally, metal ions)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L64 ANSWER 7 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:159263 HCAPLUS Full-text
DOCUMENT NUMBER: 140:177877
TITLE: Highly porous ceramics, their manufacture, and use as base materials for cell culture
INVENTOR(S): Imaizumi, Yukifumi; Aiba, Yoshiro; Imura, Koichi; Uemoto, Hideo
PATENT ASSIGNEE(S): Toshiba Ceramics Co., Ltd., Japan; Covalent Materials Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004059344	A	20040226	JP 2002-216713 <--	20020725
JP 4293334	B2	20090708		
PRIORITY APPLN. INFO.:			JP 2002-216713 <--	20020725

ED Entered STN: 27 Feb 2004
AB The highly porous ceramics, useful as base materials for cell culture, have 3-dimensional network pore structures, porosity 85-99%, and the volume ratio of pores having diams. 100-2000 μm to the porous ceramics of ≥50%. An aqueous slurry containing Al2O3 powder (average particle size 1 .mu .m) and ammonium polycarboxylate (dispersant) was stirred with polyoxyethylene higher alkyl ether (foaming agent) and an epoxy resin, stirred with iminobis(propylamine) (curing agent), and the resulting foamed slurry was cured and gelled in a mold, released from the mold, and the molded article was dried at 40° and relative humidity 90% for 72 h, and fired at 1600° to give a porous Al2O3 ceramic, which showed porosity 95% and pore diameter 200-800 . mu.m and enhanced the activity of cultured rat hepatocytes.
IT 1306-06-5, Hydroxyapatite
(ceramics; manufacture of highly porous ceramics useful as base materials for cell culture)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C04B0038-00 [I,A]; C04B0038-10 [I,A]; C12M0003-00 [I,A]
IPCR C04B0038-00 [I,A]; C04B0038-00 [I,C*]; C04B0038-10 [I,A]; C04B0038-10 [I,C*]; C12M0003-00 [I,A]; C12M0003-00 [I,C*]
CC 9-11 (Biochemical Methods)
Section cross-reference(s): 57, 63
IT Dispersing agents
Foaming agents
Surfactants
(anionic; manufacture of highly porous ceramics useful as base materials

for cell culture)
IT Dispersing agents
Foaming agents
Surfactants
(nonionic; manufacture of highly porous ceramics useful as base materials for cell culture)
IT Carboxylic acids
(polycarboxylic, ammonium salts, dispersant; manufacture of highly porous ceramics useful as base materials for cell culture)
IT 409-21-2, Silicon carbide, biological studies 1306-06-5, Hydroxyapatite 1314-23-4, Zirconia, biological studies 1344-28-1, Alumina, biological studies 7631-86-9, Silica, biological studies 10103-46-5, Calcium phosphate 12033-89-5, Silicon nitride, biological studies 13463-67-7, Titania, biological studies 60800-19-3, Aluminum zirconium oxide 159995-97-8, Aluminum silicon oxide
(ceramics; manufacture of highly porous ceramics useful as base materials for cell culture)

L64 ANSWER 8 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:76608 HCAPLUS Full-text
DOCUMENT NUMBER: 140:112246
TITLE: Polymer-platy hydroxyapatite composite aqueous dispersions with high dispersion stability and their manufacture for transparent barrier films
INVENTOR(S): Takagi, Toshihiko; Tanabe, Masaru; Haga, Yasuhiko
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004026963	A	20040129	JP 2002-183886 <--	20020625
PRIORITY APPLN. INFO.:			JP 2002-183886 <--	20020625

ED Entered STN: 30 Jan 2004
AB The dispersions contain homogeneously dispersed platy hydroxyapatite particles having size ≤500 nm and are manufactured in the presence of CO2H-containing water-soluble or water-dispersible polymers by reacting Ca compds. and H3PO4 (salts) in solns. at pH ≥7 after keeping the solns. at pH ≤7 for short time. The films are obtained by drying the dispersions. Thus, Ca(OH)2 was reacted with H3PO4 in an aqueous dispersion containing KM 118 [CO2H-modified poly(vinyl alc.)] to give a polymer-hydroxyapatite composite dispersion with good storage stability.
IT 1306-06-5P, Hydroxyapatite
(manufacture of polymer-platy hydroxyapatite composite aqueous dispersions with high dispersion stability for transparent barrier films)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number

HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C08L0101-14 [ICM,7]; C08L0101-00 [ICM,7,C*]; C08J0005-18 [ICS,7]; C08K0003-32 [ICS,7]; C08K0003-00 [ICS,7,C*]
IPCR C08J0005-18 [I,C*]; C08J0005-18 [I,A]; C08K0003-00 [I,C*]; C08K0003-32 [I,A]; C08L0101-00 [I,C*]; C08L0101-14 [I,A]
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38
ST carboxy polyvinyl alc hydroxyapatite composite dispersion drying film; calcium hydroxide phosphoric acid reaction hydroxyapatite dispersion
IT Disperse systems
Plastic films
Transparent films
(manufacture of polymer-platy hydroxyapatite composite aqueous dispersions with high dispersion stability for transparent barrier films)
IT 1305-62-0, Calcium hydroxide, reactions 7664-38-2, Phosphoric acid, reactions
(hydroxyapatite from; manufacture of polymer-platy hydroxyapatite composite aqueous dispersions with high dispersion stability for transparent barrier films)
IT 1306-06-5P, Hydroxyapatite
(manufacture of polymer-platy hydroxyapatite composite aqueous dispersions with high dispersion stability for transparent barrier films)
IT 79-06-1D, Acrylamide, polymers 79-39-0D, Methacrylamide, polymers 88-12-0D, polymers 9002-89-5D, Poly(vinyl alcohol), carboxylic acid-modified 9004-32-4, Carboxymethylcellulose 111214-41-6, KM 118
(manufacture of polymer-platy hydroxyapatite composite aqueous dispersions with high dispersion stability for transparent barrier films)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L64 ANSWER 9 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:913076 HCAPLUS Full-text
DOCUMENT NUMBER: 139:386434
TITLE: Colloidal dispersions of calcium phosphate nanoparticles and a protein
INVENTOR(S): Chane-Ching, Jean-Yves
PATENT ASSIGNEE(S): Rhodia Chimie, Fr.
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003095085	A1	20031120	WO 2003-FR1434 <--	20030512

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,

NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

FR 2839657	A1	20031121	FR 2002-5905 <--	20020514
FR 2839657	B1	20040813		
AU 2003255566	A1	20031111	AU 2003-255566 <--	20030512
PRIORITY APPLN. INFO.:			FR 2002-5905 <--	A 20020514
			WO 2003-FR1434 <--	W 20030512

ED Entered STN: 21 Nov 2003

AB The invention concerns colloidal dispersions of calcium phosphate nanoparticles and 1 protein, the size of the nanoparticles ranging 50-300 nm, and the morphol. of the nanoparticles being spherical. The dispersions are prepared by a method characterized in that it comprises the following steps: forming a mixture containing the calcium complexing agent and a calcium source, then adding to the medium at least 1 protein, thereafter adding a phosphorus source and heating the medium. The invention also concerns nanoparticles obtained by freeze-drying the dispersion, and the particles obtained by calcining the freeze-dried nanoparticles. The invention can be used in the food, cosmetic, pharmacol. industries. Thus, a colloidal dispersion containing a calcium phosphate, a complexing agent (a glutamic acid derivative), and a soy protein.

IT 1306-06-5, Hydroxylapatite
(colloidal dispersions of calcium phosphate nanoparticles and protein)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI B01J0013-00 [ICM,7]; C01B0025-32 [ICS,7]; C01B0025-00 [ICS,7,C*]
IPCR A61K0009-10 [I,C*]; A61K0009-10 [I,A]; A61K0009-51 [I,C*]; A61K0009-51 [I,A]; A61K0033-06 [I,C*]; A61K0033-06 [I,A]; B01J0013-00 [I,C*]; B01J0013-00 [I,A]

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17, 62

ST colloidal dispersion calcium phosphate nanoparticle protein

IT Calcination
Cosmetics
Freeze drying
Particle size distribution
(colloidal dispersions of calcium phosphate nanoparticles and protein)

IT Proteins
(colloidal dispersions of calcium phosphate nanoparticles and protein)

IT Proteins

(milk; colloidal dispersions of calcium phosphate nanoparticles and protein)
IT Drug delivery systems
(nanoparticles; colloidal dispersions of calcium phosphate nanoparticles and protein)
IT Proteins
(soybean; colloidal dispersions of calcium phosphate nanoparticles and protein)
IT 51981-21-6
(colloidal dispersions of calcium phosphate nanoparticles and protein)
IT 1306-06-5, Hydroxylapatite 7757-93-9 9001-63-2, Lysozyme
(colloidal dispersions of calcium phosphate nanoparticles and protein)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 10 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:252725 HCAPLUS Full-text
DOCUMENT NUMBER: 139:312301
TITLE: Dental implants: surface modification of cp-Ti using plasma spraying and the deposition of hydroxyapatite
AUTHOR(S): Oliveira Vercik, L. C.; Alencar, A. C.; Ramires, I.; Guastaldi, A. C.
CORPORATE SOURCE: Departamento de Fisico-Quimica, Instituto de Quimica de Araraquara, UNESP, Araraquara, SP, 14801-970, Brazil
SOURCE: Materials Science Forum (2003), 416-418(Advanced Powder Technology III), 669-674
CODEN: MSFOEP; ISSN: 0255-5476
PUBLISHER: Trans Tech Publications Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 02 Apr 2003
AB The com. pure titanium (cp-Ti) is currently being used with great success in dental implants. In this work we investigate how the cp-Ti implants can be improved by modifying the metal surface morphol., on which a synthetic material with properties similar to that of the inorg. part of the bone, is deposited to facilitate the bone/implant bonding. This synthetic material is the hydroxyapatite, HA, a calcium phosphate ceramic. The surface modification consists in the application of a titanium oxide (TiO2) layer, using the thermal aspersion - plasma spray technique, with posterior deposition of HA, using the biomimetic method. The x-ray diffraction (XRD), SEM with Energy Dispersive x-ray (EDX) and Diffuse Reflectance IR Fourier Transform (DRIFT) techniques have been used for characterizing phases, microstructures and morphologies of the coatings. The TiO2 deposit shows a mixture of anatase, rutilo and TiO2-x phases, and a porous and laminar morphol., which facilitate the HA deposition. After the thermal treatment, the previously amorphous structured HA coating, shows a porous homogeneous morphol. with particle size of about 2-2.5 μm, with crystallinity and composition similar to that of the biol. HA.
IT 1306-06-5, Hydroxyapatite
(dental implants surface modification of cp-Ti using plasma spraying and the deposition of hydroxyapatite)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component

		Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

CC 63-7 (Pharmaceuticals)
IT 1306-06-5, Hydroxyapatite 7440-32-6, Titanium, biological studies
(dental implants surface modification of cp-Ti using plasma spraying and the deposition of hydroxyapatite)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 11 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:874907 HCAPLUS Full-text
DOCUMENT NUMBER: 139:154782
TITLE: Hydroxyapatite coating on titanium by means of thermal substrate method in aqueous solutions
AUTHOR(S): Okido, Masazumi; Kuroda, Kensuke; Ishikawa, Masahiko; Ichino, Ryoichi; Takai, Osamu
CORPORATE SOURCE: Center for Integrated Research in Science and Engineering, Nagoya University, Furo-cho, Chikusa, Nagoya, 464-8603, Japan
SOURCE: Solid State Ionics (2002), 151(1-4), 47-52
CODEN: SSIOD3; ISSN: 0167-2738
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 19 Nov 2002
AB Hydroxyapatite (HAp) films were formed on a titanium substrate in aqueous solns. by the thermal substrate method controlling the substrate temperature and a cathodic electrolysis method supplying hydroxide ions. A local increase in temperature on substrate and the supply of calcium, phosphate, and hydroxide ions near the substrate accelerate the HAp film formation on the substrate in aqueous solns. at ambient temperature and pressure. The HAp can be directly coated only on the substrate quickly by heating the substrate in an aqueous solution In the cathodic process, reduction of hydrogen peroxide forms hydroxide ions, which results in the formation of a flat, plate-like HAp film.
IT 21063-37-6, Monetite
(hydroxyapatite coating on titanium by means of thermal substrate method in aqueous solns.)
RN 21063-37-6 HCAPLUS
CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

● Ca

IT 1306-06-5, Hydroxyapatite
(hydroxyapatite coating on titanium by means of thermal substrate method in aqueous solns.)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

CC 63-7 (Pharmaceuticals)
IT 21063-37-6, Monetite
(hydroxyapatite coating on titanium by means of thermal substrate method in aqueous solns.)
IT 1306-06-5, Hydroxyapatite
(hydroxyapatite coating on titanium by means of thermal substrate method in aqueous solns.)
OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 12 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:711241 HCAPLUS Full-text
DOCUMENT NUMBER: 137:237796
TITLE: Viscous suspension spinning process for producing resorbable ceramic fibers and scaffolds
INVENTOR(S): Janas, Victor F.; Tenhuisen, Kevor S.
PATENT ASSIGNEE(S): Ethicon, Inc., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6451059	B1	20020917	US 1999-439656 <--	19991112
PRIORITY APPLN. INFO.:			US 1999-439656 <--	19991112

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
ED Entered STN: 19 Sep 2002
AB The present invention provides a hard tissue scaffold comprising a resorbable ceramic. The scaffold is formed by first creating unfired (green) bioresorbable ceramic fibers via the viscous suspension spinning process (VSSP). Then, using common textile techniques, a structure in which the size and distribution of interconnected pores are controlled, is created. Heat treating the structure to remove the organic phase and sintering the ceramic yields a hard tissue scaffold. For example, particles of ceramic tricalcium phosphate were milled in water containing a sodium silicate surfactant to create a dispersion. The dispersion was added to a viscose at the ratio of ceramic particles to cellulose of 70:30 by weight The mixture was pumped through a 100-hole, 90-μ spinneret into a solution of sulfuric acid which, after subsequent washes in mild acid solns. and water, yielded a tow of

cellulose fibers highly filled with ceramic phosphate and sulfate particles. Approx. 1 g of yarn was placed on platinum foil, which in turn was put onto an aluminum setter plate, and placed in a high temperature furnace to remove the cellulose and allow for sintering of the ceramic particles. The resulting ceramic fibers were a multiphasic blend of calcium sulfates, sodium sulfates, calcium phosphates, and sodium phosphates. By weight, the fibers were 52% SO4, 37% CaO, 4.5% P2O5, 3.6% Na2O, and approx. 3% of trace compds. such as SiO2 and ZnO.

IT 1306-06-5, Hydroxyapatite
(viscous suspension spinning process for producing resorbable ceramic fibers and scaffolds)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

INCL 623023510

IPCI A61F0002-28 [ICM,7]; A61F0002-02 [ICS,7]; B05D0003-00 [ICS,7]

IPCR A61F0002-00 [N,C*]; A61F0002-00 [N,A]; A61F0002-02 [N,C*]; A61F0002-02 [N,A]; A61F0002-28 [I,C*]; A61F0002-28 [I,A]; A61F0002-30 [N,C*]; A61F0002-30 [N,A]; A61F0002-46 [N,C*]; A61F0002-46 [N,A]; A61L0027-00 [I,C*]; A61L0027-12 [I,A]; C03B0037-01 [I,C*]; C03B0037-01 [I,A]; C04B0030-00 [I,C*]; C04B0030-02 [I,A]; C04B0035-01 [I,C*]; C04B0035-447 [I,A]; C04B0035-622 [I,C*]; C04B0035-622 [I,A]

NCL 623/023.510; 427/002.270; 623/023.560; 623/023.750; 623/023.760

CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 57

IT Pore size
Pore size distribution
(controlled; viscous suspension spinning process for producing resorbable ceramic fibers and scaffolds)

IT 1306-06-5, Hydroxyapatite 7758-87-4, Tricalcium phosphate 10103-46-5, Calcium phosphate 13767-12-9, Tetracalcium phosphate
(viscous suspension spinning process for producing resorbable ceramic fibers and scaffolds)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 13 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:850654 HCAPLUS Full-text

DOCUMENT NUMBER: 135:375438

TITLE: Manufacture of porous ceramic films from an aqueous composite particle dispersion

INVENTOR(S): Xue, Zhijian; Wiese, Harm

PATENT ASSIGNEE(S): Basf A.-G., Germany

SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10024561	A1	20011122	DE 2000-10024561 <--	20000518
WO 2001087800	A1	20011122	WO 2001-EP5196 <--	20010508
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1286933	A1	20030305	EP 2001-947267 <--	20010508
EP 1286933	B1	20040915		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001010881	A	20030610	BR 2001-10881 <--	20010508
JP 2003533429	T	20031111	JP 2001-584199 <--	20010508
AT 276216	T	20041015	AT 2001-947267 <--	20010508
US 20030134735	A1	20030717	US 2002-275764 <--	20021108
PRIORITY APPLN. INFO.:			DE 2000-10024561 <--	A 20000518
			WO 2001-EP5196 <--	W 20010508

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 23 Nov 2001

AB The porous inorg. solids are manufactured from an aqueous dispersion of particles having a size of 50-1500 nm which are composed of polymers and inorg. solids. The aqueous dispersion of ceramic and polymer particles is deposited on a substrate, dried, the obtained dry film is removed from the substrate, and sintered at 300-7000 that accompanied with organic evaporation The resulting porous ceramic films are suitable as catalyst carriers, membranes, adsorbents, thermal- and sound-insulating materials, and chromatog. carriers.

IT 1306-06-5, Hydroxyl apatite
(nanoparticles, aqueous dispersion of; manufacture of porous ceramic films from aqueous composite particle dispersion)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C04B0038-00 [ICM,7]

IPCR B01D0039-20 [I,C*]; B01D0039-20 [I,A]; B01D0071-00 [I,C*]; B01D0071-02 [I,A]; B01J0020-02 [I,C*]; B01J0020-02 [I,A]; B01J0020-281 [I,C*];

B01J0020-281 [I,A]; B01J0020-30 [I,C*]; B01J0020-30 [I,A]; B01J0021-00 [I,C*]; B01J0021-08 [I,A]; B01J0023-06 [I,C*]; B01J0023-06 [I,A]; B01J0032-00 [I,C*]; B01J0032-00 [I,A]; B01J0035-00 [I,C*]; B01J0035-06 [I,A]; B01J0037-00 [I,C*]; B01J0037-00 [I,A]; B01J0037-02 [I,A]; C01B0033-00 [I,C*]; C01B0033-12 [I,A]; C04B0038-06 [I,C*]; C04B0038-06 [I,A]

CC 57-2 (Ceramics)

IT Alcohols, processes
(C16-18, ethoxylated, nonionic emulsifier; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT Polymers, processes
(aqueous dispersion of; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT Adsorbents
Catalysts
Membranes, nonbiological
(porous ceramic films for; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT Films
(porous ceramic films; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT Ceramics
(porous, films; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT Thermal insulators
(sound-insulating, porous ceramic films for; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT Sound insulators
(thermally insulating, porous ceramic films for; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT 7631-86-9, Nyacol 2040, processes
(colloidal, nanoparticles, aqueous dispersion of; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT 79-10-7D, Acrylic acid, ester 79-41-4D, Methacrylic acid, ester 80-62-6, Methylmethacrylate 100-42-5, Styrene, processes 103-11-7 110-16-7D, Maleic acid, ester 110-17-8D, Fumaric acid, ester 141-32-2, Butylacrylate
(nanoparticles, aqueous dispersion of; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT 471-34-1, Calcium carbonate, processes 546-93-0, Magnesium carbonate 1306-06-5, Hydroxyl apatite 1306-38-3, Cerium oxide, processes 1309-37-1, Iron oxide (Fe2O3), processes 1314-13-2, Zinc oxide, processes 1314-36-9, Yttrium oxide, processes 1314-98-3, Zinc sulfide, processes 1317-61-9, Iron oxide (Fe3O4), processes 1344-28-1, Alumina, processes 1345-25-1, Iron oxide (FeO), processes 7758-87-4, Calcium orthophosphate 7790-76-3, Calcium pyrophosphate 10043-83-1, Magnesium orthophosphate 13446-24-7, Magnesium pyrophosphate 13463-67-7, Titanium oxide, processes 13477-39-9, Calcium metaphosphate 13573-12-1, Magnesium metaphosphate 18282-10-5, Nyacol SN15 21645-51-2, Aluminum hydroxide, processes
(nanoparticles, aqueous dispersion of; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT 57-09-0, N-Cetyl-N,N,N-trimethyl ammonium bromide 100-43-6, 4-Vinylpyridine
(nonionic emulsifier; manufacture of porous ceramic films from aqueous composite particle dispersion)

IT 7727-54-0, Ammonium peroxydisulfate 7775-27-1, Sodium peroxydisulfate
(solving initiator; manufacture of porous ceramic films from aqueous composite particle dispersion)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L64 ANSWER 14 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:400664 HCAPLUS Full-text
DOCUMENT NUMBER: 135:277952
TITLE: Coating of hydroxyapatite on various substrates via hydrothermal reactions of Ca(EDTA)2- and phosphate
AUTHOR(S): Fujishiro, Y.; Nishino, M.; Sugimori, A.; Okuwaki, A.; Sato, T.
CORPORATE SOURCE: Institute for Chemical Reaction Science, Tohoku University, Sendai, 980-8577, Japan
SOURCE: Journal of Materials Science: Materials in Medicine (2001), 12(4), 333-337
CODEN: JSMMEL; ISSN: 0957-4530
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Jun 2001
AB Hydroxyapatite was coated on various substrates such as 12 mol% ceria-doped tetragonal zirconia (12Ce-TZP), 3 mol% yttria-doped tetragonal zirconia (3Y-TZP), alumina, monetite coated titanium (Ti/CaHPO4) and calcium titanate coated titanium (Ti/CaTiO3) via hydrothermal reactions of Ca(EDTA)2- and 0.05 M NaH2PO4 at initial pH 6 and 160-200° for 0.5-6 h. Rod-like particles of hydroxyapatite precipitated to form film on the substrates above 160°. The morphol. of the film changed significantly depending on the characteristics of substrate, i.e. hydroxyapatite entirely coated the surfaces of 12Ce-TZP, Ti/CaHPO4 and Ti/CaTiO3 plates, but sparsely deposited on 3Y-TZP and Al2O3 plates. Film thickness increased with time (.apprx.20 and 90 μm on 12Ce-TZP plates for 0.5 and 6 h, resp., at pH 6 and 200°). The adhesive strength of the film for the substrate was in the order, 12Ce-TZP/hydroxyapatite(28 MPa) > Ti/CaTiO3/hydroxyapatite (22 MPa) > Ti/CaHPO4/hydroxyapatite (9 MPa).
IT 1306-06-5, Hydroxyapatite 21063-37-6, Monetite
(coating of hydroxyapatite on various substrates via hydrothermal reactions of Ca(edta)2- and phosphate)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 21063-37-6 HCAPLUS
CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

CC 63-7 (Pharmaceuticals)
IT Adhesion, physical
Coating materials
Grain size
Hydrothermal reactions
Sintering
Thickness
(coating of hydroxyapatite on various substrates via hydrothermal reactions of Ca(edta)2- and phosphate)
IT 1306-06-5, Hydroxyapatite 1306-38-3, Ceria, biological studies 1314-23-4, Zirconia, biological studies 1314-36-9, Yttria, biological studies 1344-28-1, Alumina, biological studies 12049-50-2, Calcium titanate 19267-05-1 21063-37-6, Monetite
(coating of hydroxyapatite on various substrates via hydrothermal reactions of Ca(edta)2- and phosphate)
OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 15 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:232482 HCAPLUS Full-text
DOCUMENT NUMBER: 134:267065
TITLE: Calcium phosphate type inorganic dispersants useful as suspension polymerization stabilizers, polymer particles having uniform particle size and sharp particle size distribution, unsaturated polyester resin compositions having shrinkage resistance, and toner compositions having high resolution
INVENTOR(S): Shibata, Hiroshi; Hayashi, Yusuke; Nishioka, Hidehiko
PATENT ASSIGNEE(S): Maruo Calcium Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001089114	A	20010403	JP 1999-266713 <--	19990921
PRIORITY APPLN. INFO.:			JP 1999-266713 <--	19990921

ED Entered STN: 03 Apr 2001

AB Title dispersants are obtained by treatment of calcium phosphate type inorg. particles with organic surface treatment agents and satisfy (a) 0.002 ≤ dx1 ≤ 0.1 (μm), (b) 0.05 ≤ α ≤ 0.5 (μm), and (c) 20 ≤ Sw1 ≤ 200 m2/g, where dx1 = primary particle size (average particle size measured on electron microg., μm), α = secondary particle size (50% average particle size measured by a particle size distribution meter, μm), and Sw1 = BET sp. surface area measured by nitrogen adsorption method (m2/g). Thus,100 parts styrene and 0.4 parts divinylbenzene were suspension-polymerized in the presence of apatite surface-treated with ammonium salt of acrylic acid-itaconic acid-polyalkylene glycol mono(meth)acrylate copolymer to give polymer particles with average particle size 50 . mu.m, yield (particle size 30-80 . mu.m) 92%, and no particle deposit on the reactor walls. A composition containing 100 parts Polyset PS 9126-2 and 15 parts polymer particles obtained above was mixed with 10 parts (per 100 parts composition) glass fibers and molded to give a molded product with shrinkage 0.36%, uniform gloss, and light transmittance 10%.

IT 1306-06-5P, Hydroxyapatite
(surface-treated; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C01B0025-32 [ICM,7]; B01F0017-00 [ICS,7]; C08F0002-18 [ICS,7]; C08L0067-00 [ICS,7]; G03G0009-08 [ICS,7]; C08K0003-32 [ICS,7]

IPCR B01F0017-00 [I,C*]; B01F0017-00 [I,A]; C01B0025-00 [I,C*]; C01B0025-32 [I,A]; C08F0002-12 [I,C*]; C08F0002-18 [I,A]; C08K0003-00 [I,C*]; C08K0003-32 [I,A]; C08L0067-00 [I,C*]; C08L0067-00 [I,A]; G03G0009-08 [I,C*]; G03G0009-08 [I,A]

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 49, 74

ST calcium phosphate treated dispersant
prepn suspension polymn stabilizer; unsatd polyester shrinkage resistance prepn; toner treated calcium phosphate dispersant suspension polymn

IT Polyoxyalkylenes, preparation
(acrylic, graft, calcium phosphate type inorg. particles surface-treated with; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Dispersing agents
Electrographic toners
(calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Polymer blends
(calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Chelating agents

(calcium phosphate type inorg. particles surface-treated with; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Agglomeration
(in preparation of dispersants; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Apatite-group minerals
(surface-treated; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Polymerization
(suspension; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT Polyesters, preparation
(unsatd., crosslinked; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 79-10-7DP, Acrylic acid, polymers with itaconic acid and polyalkylene glycol mono(meth)acrylate, ammonium salt 97-65-4DP, Itaconic acid, polymers with acrylic acid and polyalkylene glycol mono(meth)acrylate, ammonium salt
(calcium phosphate type inorg. particle surface-treated with; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 3458-72-8, Citric acid triammonium salt
(calcium phosphate type inorg. particle surface-treated with; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 139038-97-4P, Polyset PS 9126-2
(crosslinked; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 1305-62-0, Milk of lime, reactions 7601-54-9, Trisodium phosphate 7664-38-2, Phosphoric acid, reactions 10043-52-4, Calcium chloride, reactions
(in preparation of calcium phosphate type inorg. particle; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 9003-53-6P, Polystyrene 9003-70-7P, Styrene-divinylbenzene copolymer
(polymer particle; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 1306-06-5P, Hydroxyapatite
(surface-treated; calcium phosphate type

dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

IT 10103-46-5, Calcium phosphate
(surface-treated; calcium phosphate type dispersants useful as suspension polymerization stabilizers for preparation of polymer particles useful for unsatd. polyester or toner compns.)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L64 ANSWER 16 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:124246 HCAPLUS Full-text
DOCUMENT NUMBER: 134:180170
TITLE: Inorganic particle dispersions containing cellulose and their uses
INVENTOR(S): Ono, Hirofumi; Sawada, Naoharu; Kanekiyo, Kenji
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001049031	A	20010220	JP 1999-316465 <--	19991108
JP 4282848	B2	20090624		
PRIORITY APPLN. INFO.:			JP 1999-158072 A <--	19990604

ED Entered STN: 20 Feb 2001
AB The dispersions, useful for coatings, cosmetics, chemical mech. polishing agents, etc., comprising 0.1-80% inorg. particles and 0.1-10% cellulose [d.p. ≤100; I-type crystal fraction (χI) ≤0.1; II-type crystal fraction (χII) ≤0.4; average size ≤5 μm] are manufactured Thus, an aqueous dispersion containing 5% SiO2 (Sunsphere H31) and 1% cellulose (χI 0; χII 0.31; d.p. 32; average size 0.28 . mu.m) showed good dispersibility. IPCI C08L0001-02 [I,A]; C08L0001-00 [I,C*]; A61K0008-04 [I,A]; A61K0008-73 [I,A]; A61K0008-72 [I,C*]; C08K0003-00 [I,A]; C09D0101-02 [I,A]; C09D0101-00 [I,C*]; C09K0003-14 [I,A]
IPCR A61K0008-19 [I,C*]; A61K0008-19 [I,A]; A61K0008-04 [I,C*]; A61K0008-04 [I,A]; A61K0008-25 [I,A]; A61K0008-72 [I,C*]; A61K0008-73 [I,A]; A61Q0001-00 [I,C*]; A61Q0001-00 [I,A]; A61Q0001-02 [I,C*]; A61Q0001-10 [I,A]; A61Q0001-12 [I,C*]; A61Q0001-12 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0001-00 [I,C*]; C08L0001-02 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0101-00 [I,C*]; C09D0101-02 [I,A]; C09K0003-14 [I,C*]; C09K0003-14 [I,A]
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 42, 62, 76
ST cellulose dispersant silica coating polishing agent; aq dispersion cellulose cosmetic
IT Dispersing agents
(cellulose; inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
IT Coating materials
(dispersion, water-thinned; inorg. particle dispersions

containing cellulose for coatings, cosmetics, and polishing agents)
IT Cosmetics
Dentifrices
Polishing materials
(inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
IT Kaolin, uses
(inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
IT 13463-67-7, Titanium oxide, uses
(TTO 51; inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
IT 9004-34-6, Cellulose, uses
(dispersant; inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
IT 471-34-1, Calcium carbonate, uses 1309-37-1, Diiron trioxide, uses 1317-61-9, Triiron tetraoxide, uses 1344-28-1, Aluminum oxide, uses 7631-86-9, Sunsphere H31, uses 7782-40-3, Diamond, uses 7789-77-7, Calcium hydrogen phosphate (CaHPO4) hydrate (1:2) 14807-96-6, Talc, uses 61246-21-7, Ferrite yellow
(inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
IT 56-81-5, Glycerin, uses 57-55-6, Propylene glycol, uses 25265-75-2, Butylene glycol
(solvent; inorg. particle dispersions containing cellulose for coatings, cosmetics, and polishing agents)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L64 ANSWER 17 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:608828 HCAPLUS Full-text
DOCUMENT NUMBER: 133:178173
TITLE: Calcium phosphate-based porous fillers for resin composition
INVENTOR(S): Takiyama, Shigeo; Kasahara, Hidemitsu; Kasahara, Hidemitsu; Minayoshi, Shiro
PATENT ASSIGNEE(S): Maruo Calcium Co., Ltd., Japan
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050510	A1	20000831	WO 2000-JP924 <--	20000218
W: CN, JP, KR, US RW: DE, FR, GB, LU				
EP 1201708	A1	20020502	EP 2000-904027 <--	20000218
EP 1201708	B1	20040506		
R: DE, FR, GB, LU				
CN 1156524	C	20040707	CN 2000-806612 <--	20000218
TW 500752	B	20020901	TW 2000-89103021 <--	20000222
US 6663948	B1	20031216	US 2001-926043 <--	20010820

PRIORITY APPLN. INFO.: JP 1999-42765 A 19990222
<--
WO 2000-JP924 W 20000218
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 01 Sep 2000

AB Title fillers (MR) comprising calcium phosphate compound (R) supported by porous particles (M) with petaloid structure are characterized by: (a) 0.1≤ Dmr ≤20 (. mu.m); (b) 1≤ Dmr/Dm ≤5; (c) 0.5≤ Tmr1 ≤5 (wt%); (d) 0.01≤ Tmr1/Tm1 <1; (e) 0.3≤ Tmr2 ≤3 (wt%); (f) 0.01≤ Tmr2/Tm2 <1; (g) 1≤ αmr ≤5 (α = dmr50/Dmr); and (h) 0≤ βmr ≤2 [β = (dmr90 - dmr10)/dmr50], where Dmr and Dm are the average grain diams. (μm) of MR composites and M particles, resp., measured by scanning electronic microscopy (SEM); Tmr1,2 and Tm1,2 thermal reduction rates (wt%) of MR and M at 500° and 200°; αmr dispersion coefficient of MR; dm50 and dmr50 50% average diams. (μm) of M and MR determined by microtrack FRA laser grain size distribution meter; βmr MR sharpness; and dm10,90 and dmr10,90 10% and 90% sieved diams. (μm) of M and MR determined by microtrack FRA laser grain size distribution meter.

IT 1306-06-5, Hydroxyapatite
(preparation of calcium phosphate-based porous fillers for resin composition)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C08K0009-02 [ICM,7]; C08K0009-00 [ICM,7,C*]; C08L0101-00 [ICS,7]; C01B0025-32 [ICS,7]; C01B0025-00 [ICS,7,C*]

IPCR C08K0009-00 [I,C*]; C08K0009-02 [I,A]

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 40

ST calcium phosphate filler porous petaloid structure polypropylene film

IT Polyesters, properties
(fiber; preparation of calcium phosphate-based porous fillers for resin composition)

IT Fillers
Plastic films
Porous materials
(preparation of calcium phosphate-based porous fillers for resin composition)

IT Polyamides, properties
Polyester fibers, properties
(preparation of calcium phosphate-based porous fillers for resin composition)

IT 25038-59-9, Polyethylene terephthalate, properties
(fiber; preparation of calcium phosphate-based porous fillers for resin composition)

IT 10103-46-5P, Calcium phosphate
(preparation of calcium phosphate-based porous fillers for resin composition)

IT 9003-07-0, Polypropylene 25038-54-4, Nylon 6, properties
(preparation of calcium phosphate-based porous fillers for resin composition)

IT 1306-06-5, Hydroxyapatite
(preparation of calcium phosphate-based porous fillers for resin composition)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 18 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:342549 HCAPLUS Full-text
DOCUMENT NUMBER: 132:339077
TITLE: Hydroxylapatite tabular crystals and cosmetics containing them
INVENTOR(S): Saeki, Tatsuya
PATENT ASSIGNEE(S): Sekisui Plastics Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000143443	A	20000523	JP 1998-327473 <--	19981102
PRIORITY APPLN. INFO.:			JP 1998-327473 <--	19981102

ED Entered STN: 23 May 2000
AB The tabular crystals of hydroxylapatite (I) is prepared by suspending tabular crystal powder of CaHPO4.2H2O (II) in H2O, adding micropowder of Ca(OH)2 with average particle size smaller than that of II to give aqueous suspension, and then adjusting pH of the mixture to 6-10. Also claimed are cosmetics containing I prepared as described above. The cosmetics are smoothly spread over skin and resistant to sebum. Powder of II (average major axis 30 μm, average minor axis 10 μm, average thickness 0.5 μm; 1 kg) was mixed with 10 L H2O and heated at 40-50° under stirring. Powder of 4-.mu .m-diameter Ca(OH)2 was added to the above mixture and the suspension was adjusted to pH 6-10 with an aqueous NH3 solution to give I. An aqueous dispersion of I did not foam when treated with HCl. Foundations and body powder foams containing I were also formulated.
IT 1306-06-5P, Hydroxylapatite
(preparation of hydroxylapatite tabular crystals from CaHPO4 and Ca(OH)2 for cosmetics)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI A61K0007-02 [ICM,7]; C01B0025-32 [ICS,7]; A61K0007-035 [ICS,7]
IPCR A61K0008-30 [I,C*]; A61K0008-30 [I,A]; A61K0008-00 [I,C*]; A61K0008-00 [I,A]; A61K0008-19 [I,C*]; A61K0008-19 [I,A]; A61K0008-24 [I,A]; A61Q0001-00 [I,C*]; A61Q0001-00 [I,A]; A61Q0001-02 [I,C*]; A61Q0001-02 [I,A]; A61Q0001-12 [I,C*]; A61Q0001-12 [I,A]; C01B0025-00 [I,C*];

C01B0025-32 [I,A]
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 57
ST hydroxylapatite tabular crystal prepn calcium hydrogen phosphate; hydroxide calcium hydroxylapatite tabular crystal prepn; cosmetic hydroxylapatite tabular crystal prepn
IT Cosmetics
(foams, body powder; preparation of hydroxylapatite tabular crystals from CaHPO4 and Ca(OH)2 for cosmetics)
IT Cosmetics
(foundations; preparation of hydroxylapatite tabular crystals from CaHPO4 and Ca(OH)2 for cosmetics)
IT Cosmetics
(preparation of hydroxylapatite tabular crystals from CaHPO4 and Ca(OH)2 for cosmetics)
IT 1306-06-5P, Hydroxylapatite
(preparation of hydroxylapatite tabular crystals from CaHPO4 and Ca(OH)2 for cosmetics)
IT 1305-62-0, Calcium hydroxide, reactions 7789-77-7, Calcium hydrogen phosphate dihydrate
(preparation of hydroxylapatite tabular crystals from CaHPO4 and Ca(OH)2 for cosmetics)

L64 ANSWER 19 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:197619 HCAPLUS Full-text
DOCUMENT NUMBER: 132:241987
TITLE: Molding of calcium phosphate granules for bone prostheses
INVENTOR(S): Tominaga, Yoshie
PATENT ASSIGNEE(S): Asahi Optical Co., Ltd., Japan; Pentax Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000084062	A	20000328	JP 1998-259656 <--	19980914
JP 3490905	B2	20040126		
PRIORITY APPLN. INFO.:			JP 1998-259656 <--	19980914

ED Entered STN: 28 Mar 2000
AB Bone prostheses comprising sintered Ca phosphate granules (size ≥100 μm) bonded together with fine Ca phosphate particles (size 1-40 μm) are molded by placing the granules in a mold, adding aqueous dispersions containing the fine particles to the mold, drying, and firing the mixts. The moldings can be disintegrated into granules which retain their original shape, by pressing them with hands and fingers for implantation into bone defects without scattering of powders. Fired hydroxyapatite (I) granules (100-400 .mu .m) (1 g) were placed in a mold, a mixture containing 0.5 g unfired I particles (3 μm) and 1 g H2O was injected into the mold, and the mixture was dried at 100° for 5 h and fired at 1200° for 4 h to give a sintered molding without warping.
IT 1306-06-5, Hydroxyapatite
(molding of Ca phosphate granules for bone prostheses)
RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI A61L0027-00 [ICM,7]
IPCR A61L0027-00 [I,C*]; A61L0027-00 [I,A]
CC 63-7 (Pharmaceuticals)
ST bone prosthesis molding calcium phosphate granule; hydroxyapatite granule molding bone implant
IT Bone
(implant; molding of Ca phosphate granules for bone prostheses)
IT Prosthetic materials and Prosthetics
(implants; molding of Ca phosphate granules for bone prostheses)
IT Prosthetic materials and Prosthetics
(molding of Ca phosphate granules for bone prostheses)
IT 1306-06-5, Hydroxyapatite 7758-87-4, Tricalcium phosphate 10103-46-5, Calcium phosphate
(molding of Ca phosphate granules for bone prostheses)

L64 ANSWER 20 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:106637 HCAPLUS Full-text
DOCUMENT NUMBER: 132:156885
TITLE: Spherical hydroxyapatite particles, their manufacture, and biological materials using them
INVENTOR(S): Ito, Mitsuo; Saeki, Tatsuya; Hitaka, Yuichi
PATENT ASSIGNEE(S): Sekisui Plastics Co., Ltd., Japan; Matsumoto Shika Daigaku
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000042096	A	20000215	JP 1998-229287 <--	19980729
JP 3866864	B2	20070110		
PRIORITY APPLN. INFO.:			JP 1998-229287 <--	19980729

ED Entered STN: 15 Feb 2000
AB The biol. materials, useful for dental materials and bone substitutes, contain bone-forming hydroxyapatite (I) particles showing average size 0.5-200 μm and pH 8-12 (when 1 g particles are stirred in 25 g H2O), prepared by adding aqueous H3PO4 solns. to suspensions containing 1-20 weight% Ca(OH)2 to adjust the pH to 9-12, controlling the temps. of the suspensions to ≤50° to prepare amorphous Ca phosphate (ACP), granulating and drying the ACP slurries, and firing the resulting spherical particles (average size 0.5-200 μm) at 800-

1300°. Spherical I particles (average size 35 μm) enhanced bone formation in rats.

IT 1306-06-5P, Hydroxyapatite
(manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI A61L0027-00 [I,A]; C01B0025-32 [I,A]; C01B0025-00 [I,C*]

IPCR A61L0027-00 [I,C*]; A61L0027-00 [I,A]; A61K0006-02 [I,C*]; A61K0006-033 [I,A]; C01B0025-00 [I,C*]; C01B0025-32 [I,A]

CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 57

ST spherical hydroxyapatite particle dental bone substitute; calcium phosphate hydroxyapatite manuf bone substitute

IT Dental materials and appliances
Prosthetic materials and Prosthetics
(ceramics; manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT Dispersing agents
(in hydroxyapatite manufacture; manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT Bone
(substitute; manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT Polymers, uses
(water-soluble, dispersing agents in hydroxyapatite manufacture; manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT 10103-46-5P, Calcium phosphate
(amorphous; manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT 79-10-7D, Acrylic acid, polymers, ammonium salts
(dispersing agent in hydroxyapatite manufacture; manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT 1306-06-5P, Hydroxyapatite
(manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

IT 1305-62-0, Calcium hydroxide, reactions 7664-38-2, Phosphoric acid, reactions
(manufacture of bone-forming spherical hydroxyapatite particles for dental and prosthetic materials)

L64 ANSWER 21 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:42007 HCAPLUS Full-text

DOCUMENT NUMBER: 132:156787

TITLE: Use of α-tricalcium phosphate (TCP) as powders and as an aqueous dispersion to modify processing, microstructure, and mechanical

properties of polymethylmethacrylate (PMMA) bone cements and to produce bone-substitute compounds

AUTHOR(S): Beruto, D. T.; Mezzasalma, S. A.; Capurro, M.; Botter, R.; Cirillo, P.

CORPORATE SOURCE: DEUIM, DEUIM, University of Genoa, Genoa, 16129, Italy

SOURCE: Journal of Biomedical Materials Research (2000), 49(4), 498-505
CODEN: JBMRBG; ISSN: 0021-9304

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 18 Jan 2000

AB Addition of α-TCP powders as aqueous dispersions to a PMMA bone cement produces a class of composites that due to their microstructure and mech. properties may be suitable for application as bone substitutes. The PMMA forms a solid cellular matrix with open cells about 100 μm in size and incorporating TCP clusters. The TCP aggregates inside the cells form a porous network, with average pore diams. of about 0.1 μm, that is accessible from the outer surface. If TCP is added to PMMA in the form of dried powders, the composites are not applicable as bone substitutes. The dynamic elastic modulus and compressive and tensile strengths were measured and discussed for both classes of composites. The mech. properties of the bone-substitute composites, although lower than the other class of composites, are still competitive with those properties of a porous ceramic matrix of hydroxyapatite and with those of natural bones.

CC 63-7 (Pharmaceuticals)

ST tricalcium phosphate powder PMMA bone cement microstructure; mech property tricalcium phosphate PMMA bone cement

IT Medical goods
(bone cements; tricalcium phosphate powders and aqueous dispersion for modification of microstructure and mech. properties of PMMA bone cements)

IT Prosthetic materials and Prosthetics
(composites, implants; tricalcium phosphate powders and aqueous dispersion for modification of microstructure and mech. properties of PMMA bone cements)

IT Bending strength
Compressive strength
Interface
Microstructure
Tensile strength
Young's modulus
(tricalcium phosphate powders and aqueous dispersion for modification of microstructure and mech. properties of PMMA bone cements)

IT 7758-87-4, Tricalcium phosphate 9011-14-7, PMMA
(tricalcium phosphate powders and aqueous dispersion for modification of microstructure and mech. properties of PMMA bone cements)

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 22 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:631045 HCAPLUS Full-text
DOCUMENT NUMBER: 131:273850
TITLE: Inorganic dispersant, stabilizer for suspension polymerization, polymer particle, unsaturated polyester resin composition, and toner composition
INVENTOR(S): Shibata, Hiroshi; Takahashi, Yoichi; Kasahara, Hidemitsu; Aoyama, Mitsunobu; Takiyama, Shigeo
PATENT ASSIGNEE(S): Maruo Calcium Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11268905	A	19991005	JP 1998-96713 <--	19980324
US 6482881	B1	20021119	US 2000-678105 <--	20001004
PRIORITY APPLN. INFO.:			JP 1998-96713 A <--	19980324

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
ED Entered STN: 06 Oct 1999
AB Inorg. dispersant comprising of Ca phosphate particles of Ca/P (atomic) ≤16.7 and having petal-shaped porous structure and satisfying the following conditions are claimed: (a) $0.1 \leq d1 \leq 20$, (b) $1 \leq \alpha \leq 5$ (α = d50/d1), (c) $0 \leq \beta \leq 2$ [β = (d90 - d10)/d50], (d) $0.01 \leq d2 \leq 1$, (e) $95 \leq \omega1 \leq 99$, (f) $70 \leq \omega2 \leq 95$, (g) $50 \leq Sw1 \leq 500$, where d1 (μm) = average particle size determined with an electron microscope photograph, d2 (. mu.m) = average pore size of the particles determined with a Hg porosimeter, α = dispersion coefficient, β = sharpness, d10, d50, d90 (μm) = 10%, 50%, and 90% average particle size determined with microtrack FRA laser grain size distribution meter, $\omega1$ (%) = static porosity determined from apparent volume [Va (mL/g)] determined by JIS K5101-92 20.1 [$\omega1 = 100 + (1 - 1/2.9Va)$], and $\omega2$ (%) = pressurized porosity determined from thickness (T) of 0.5 g sample filled in a cylinder of 2 cm2 cross-section under s pressing at 30 kg/cm2 for 30 s [$\omega2 = 100 + (1 - 0.5/2.9 + 2T)$], and Sw1 (m2/g) = BET sp. surface area determined by N adsorption method. Also claimed are (A) use of the inorg. dispersant as suspension polymerization stabilizer; (B) polymer particles obtained by suspension polymerization of vinyl monomers in presence of polymerization initiator, dispersant, and the inorg. dispersant as stabilizer; (C) polymer particles obtained by their dissoln. in a solvent with the inorg. dispersant as stabilizer, followed by dispersion and suspension in water and solvent removal; (D) polyester resin compns. containing the polymer particles C as shrinkage inhibitor; (E) and toner compns. containing the polymer particles C or D. The inorg. dispersants have high surface activity and sp. surface area.
IT 1306-06-5P, Hydroxylapatite
(polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number

HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C01B0025-32 [ICM,6]; C01B0025-32 [ICS,6]; C01B0025-00 [ICS,6,C*]; C08F0002-18 [ICS,6]; C08F0002-12 [ICS,6,C*]; C08J0003-12 [ICS,6]; C08J0003-22 [ICS,6]; C08J0003-20 [ICS,6,C*]; C08K0003-32 [ICS,6]; C08K0003-00 [ICS,6,C*]; C08L0067-06 [ICS,6]; C08L0067-00 [ICS,6,C*]; G03G0009-087 [ICS,6]; G03G0009-08 [ICS,6]; C08L0025-04 [ICS,6]; C08L0025-00 [ICS,6,C*]

IPCR C01B0025-00 [I,C*]; C01B0025-32 [I,A]; C08K0003-00 [I,C*]; C08K0003-32 [I,A]; G03G0009-08 [I,A]; G03G0009-08 [I,C*]; G03G0009-097 [I,A]; G03G0009-097 [I,C*]

CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 35, 37, 74

ST calcium phosphate dispersant porous petal structure; suspension polymn stabilizer calcium phosphate; polyester shrinkage inhibitor suspension polymd particle; toner polymer particle suspension polymd

IT Porous materials
(calcium phosphate dispersants; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT Electrophotographic toners
(polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT Polymerization
(suspension, stabilizer for; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT Polyesters, processes
(toner compns.; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT Polyesters, uses
(unsatd., suspension polymerized particles as shrink inhibitor for; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT 471-34-1, Calcium carbonate, processes 7664-38-2, Phosphoric acid, processes
(calcium phosphate from; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT 9003-70-7P, Divinylbenzene-styrene copolymer
(particles, polyester shrinkage inhibitors; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT 9003-53-6P, Polystyrene
(particles; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)

IT 10103-46-5P, Calcium phosphate

(polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)
IT 1306-06-5P, Hydroxylapatite
(polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)
IT 245430-68-6P, Polyset PS 9126
(suspension polymerized particles as shrink inhibitor for; polymer particles prepared by suspension polymerization using Ca phosphate inorg. dispersants and use of particles in unsatd. polyester compns. and toner compns.)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L64 ANSWER 23 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:149132 HCAPLUS Full-text
DOCUMENT NUMBER: 131:9560
TITLE: Conversion of electrolytically deposited monetite to hydroxyapatite
AUTHOR(S): Prado da Silva, M. H.; Soares, G. D. A.; Elias, C. N.; Gibson, I. R.; Best, S. M.; Bonfield, W.
CORPORATE SOURCE: IRC in Biomedical Materials, Queen Mary and Westfield College, London, E1 4NS, UK
SOURCE: Bioceramics, Proceedings of the International Symposium on Ceramics in Medicine (1998), 11, 223-226
CODEN: BPCMFX
PUBLISHER: World Scientific Publishing Co. Pte. Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 09 Mar 1999
AB A highly crystalline and homogeneous HA coating was produced on pure titanium dental implants. The process involves electrolytic deposition of monetite and further conversion into pure HA by hydrothermal treatment. XRD anal. showed that the electrolytic coating consisted of high crystallinity monetite, while SEM anal. revealed crystals with a plate-like morphol. After hydrothermal treatment in NaOH, XRD anal. confirmed that the monetite was totally converted to high crystallinity HA. Observation of the specimens using SEM revealed that the plate- like monetite crystals were transformed to needle-shaped hydroxyapatite crystals. This finding is in contrast with previous studies on the transformation of brushite to hydroxyapatite which showed no morphol. change.
IT 1306-06-5, Hydroxyapatite
(conversion of electrolytically deposited monetite to hydroxyapatite)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IT 21063-37-6, Monetite
(conversion of electrolytically deposited monetite to hydroxyapatite)
RN 21063-37-6 HCAPLUS

CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

CC 63-7 (Pharmaceuticals)
IT 1306-06-5, Hydroxyapatite
(conversion of electrolytically deposited monetite to hydroxyapatite)
IT 21063-37-6, Monetite
(conversion of electrolytically deposited monetite to hydroxyapatite)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 24 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:496738 HCAPLUS Full-text
DOCUMENT NUMBER: 129:178860
ORIGINAL REFERENCE NO.: 129:36269a,36272a
TITLE: Hydrothermally-grown monetite (CaHPO4) on hydroxyapatite
AUTHOR(S): Hsu, Yao-Shan; Chang, Edward; Liu, Hok-Shin
CORPORATE SOURCE: Dep. Materials Sci. and Eng., National Cheng Kung Univ., Tainan, 701, Taiwan
SOURCE: Ceramics International (1998), 24(4), 249-254
CODEN: CINNDH; ISSN: 0272-8842
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 11 Aug 1998
AB Using sintered hydroxyapaptite as substrate and reagent grade CaO, P2O5 and deionized water as raw materials for hydrothermal reaction, monetite (CaHPO4) could be deposited on the surface of hydroxyapatite under an an autogenous pressure of 1.55-8.59 MPa at 200-300°C. The deposition rate of monetite increased with temperature and time of the reaction. Under 8.59 MPa at 300°C, small needle-like crystals of monetite were present after 8 h, the diameter and length of the needle-like crystals became larger and the clusters of crystals were more pronounced. After growing for 120 h at 300°C, the crystal morphol. changed and the needle-like crystals coalesced into granular grains.
IT 1306-06-5, Hydroxylapatite (Ca5(OH)(PO4)3)
(ceramics; hydrothermal growth of monetite (CaHPO4) on hydroxyapatite ceramic substrates)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number

HO	1		14280-30-9
O4P	3		14265-44-2
Ca	5		7440-70-2

IT 21063-37-6P, Monetite
(hydrothermal growth of monetite (CaHPO4) on hydroxyapatite ceramic substrates)
RN 21063-37-6 HCAPLUS
CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

CC 57-2 (Ceramics)
Section cross-reference(s): 63
IT 1306-06-5, Hydroxylapatite (Ca5(OH)(PO4)3)
(ceramics; hydrothermal growth of monetite (CaHPO4) on hydroxyapatite ceramic substrates)
IT 21063-37-6P, Monetite
(hydrothermal growth of monetite (CaHPO4) on hydroxyapatite ceramic substrates)
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 25 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:421514 HCAPLUS Full-text
DOCUMENT NUMBER: 129:96427
ORIGINAL REFERENCE NO.: 129:19877a,19880a
TITLE: Manufacture of styrene resin particles and expandable styrene resin particles in high yield
INVENTOR(S): Chiya, Toyoshi
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10176005	A	19980630	JP 1996-340879 <--	19961220
PRIORITY APPLN. INFO.:			JP 1996-340879 <--	19961220

ED Entered STN: 09 Jul 1998

AB Styrene resin particles are manufactured by suspension polymerization with addition of styrene-based monomer aqueous dispersions into aqueous dispersions containing H2O-insol. inorg. salts, surfactants, and dispersed styrene resin fine particles . Expandable styrene resin particles are manufactured by addition of blowing agents into the reaction systems during or after suspension-polymerization Thus, an aqueous dispersion containing 1400 g styrene, poly(vinyl alc.), Bz2O2, and Bz02CMe3 was added to an aqueous dispersion containing 600 g polystyrene particles (average particle size 0.28 mm) 600, Ca3(PO4)2 6.0, and Na dodecylbenzenesulfonate 0.06 g and heated at 85° to give spherical polystyrene particles having particle size 0.30-0.50 mm in 99.3% yield.

IPCI C08F0002-44 [ICM,6]; C08F0012-08 [ICS,6]; C09K0003-00 [ICS,6]; B01F0017-08 [ICS,6]; B01F0017-12 [ICS,6]; B01F0017-52 [ICS,6]

IPCR B01F0017-00 [I,C*]; B01F0017-08 [I,A]; B01F0017-12 [I,C*]; B01F0017-12 [I,A]; B01F0017-52 [I,C*]; B01F0017-52 [I,A]; C08F0002-44 [I,C*]; C08F0002-44 [I,A]; C08F0012-00 [I,C*]; C08F0012-08 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 35

ST expandable styrene polymer particle manuf; calcium phosphate styrene polymer particle manuf; suspension polymn styrene resin particle manuf

IT Dispersing agents
(manufacture of (expandable) styrene resin particles in high yield by suspension polymerization in the presence of water-insol. inorg. salts)

IT Polymerization
(suspension; manufacture of (expandable) styrene resin particles in high yield by suspension polymerization in the presence of water-insol. inorg. salts)

IT 106-97-8, Butane, uses
(blowing agent; manufacture of (expandable) styrene resin particles in high yield by suspension polymerization in the presence of water-insol. inorg. salts)

IT 7758-87-4, Tricalcium phosphate
(dispersion stabilizer; manufacture of (expandable) styrene resin particles in high yield by suspension polymerization in the presence of water-insol. inorg. salts)

IT 9003-53-6P, Polystyrene 25034-86-0P, Methyl methacrylate-styrene copolymer
(manufacture of (expandable) styrene resin particles in high yield by suspension polymerization in the presence of water-insol. inorg. salts)

IT 25155-30-0, Sodium dodecylbenzenesulfonate
(surfactant; manufacture of (expandable) styrene resin particles in high yield by suspension polymerization in the presence of water-insol. inorg. salts)

L64 ANSWER 26 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:700751 HCAPLUS Full-text

DOCUMENT NUMBER: 127:322776

ORIGINAL REFERENCE NO.: 127:63199a,63202a

TITLE: Structural characterization of pulsed laser-deposited hydroxyapatite film on titanium substrate

AUTHOR(S): Wang, C. K.; Chern Lin, J. H.; Ju, C. P.; Ong, H. C.; Chang, R. P. H.

CORPORATE SOURCE: Department Materials Science and Engineering, National Cheng-Kung University, Tainan, Taiwan

SOURCE: Biomaterials (1997), 18(20), 1331-1338
CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 07 Nov 1997
AB Pure, crystalline hydroxyapatite (HA) films with thicknesses of roughly 10 μm have been deposited on titanium substrate using the pulsed laser deposition (PLD) technique. Exptl. results indicate that the structure and properties of the PLD-HA films varied with deposition parameters. The PLD process used in the present study did not induce significant amts. of calcium phosphate phases other than apatite, or significant changes in the behavior of hydroxyl or phosphate functional groups. Broad face SEM showed that HA coating was comprised of numerous essentially spheroidal-shaped particles of different sizes, while the lateral morphol. indicated that columnar and dome-shaped structures both existed in the film. Many pinholes and crevices observed on coating surfaces were linked to the original substrate surface crevices/craters. The adhesion strength of the coating, mostly in the range of 30-40 MPa, was found to be closely related to the fractog. of the tested specimen. The fracture surfaces of specimens with higher bond strengths were usually accompanied by a higher degree of deformation and coating-substrate debonding, while the fracture of specimens with lower bond strengths occurred more frequently within HA coatings in a more brittle manner. The energy dispersive spectroscopy-determined Ca/P ratios of raw HA powder (1.78) and sintered HA target for PLD (1.79) were very close, indicating that the sintering process used in the present study essentially did not change the Ca/P ratio of HA. After the PLD process, the Ca/P ratio of the HA film increased to 1.99. Cross-sectional SEM-energy dispersive spectroscopy point anal. indicated that the value of the Ca/P ratio was significantly higher in the region near the surface, particularly near the coating-substrate interface, than in the coating interior.
IT 1306-06-5, Hydroxyapatite
(structural characterization of pulsed laser-deposited hydroxyapatite film on titanium substrate)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

CC 63-7 (Pharmaceuticals)
IT 1306-06-5, Hydroxyapatite 7440-32-6, Titanium, biological studies
(structural characterization of pulsed laser-deposited hydroxyapatite film on titanium substrate)
OS.CITING REF COUNT: 97 THERE ARE 97 CAPLUS RECORDS THAT CITE THIS RECORD (97 CITINGS)
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 27 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:387906 HCAPLUS Full-text
DOCUMENT NUMBER: 127:33554
ORIGINAL REFERENCE NO.: 127:6477a,6480a
TITLE: Inorganic phosphorus transformation and transport in soils: mathematical modeling in ecosys
AUTHOR(S): Grant, R. F.; Heaney, D. J.

CORPORATE SOURCE: Dep. of Renewable Resources, Univ. of Alberta, Edmonton, AB, T6G 2E3, Can.
SOURCE: Soil Science Society of America Journal (1997), 61(3), 752-764
CODEN: SSSJD4; ISSN: 0361-5995
PUBLISHER: Soil Science Society of America
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Jun 1997

AB The movement and uptake of P in soils occur primarily in the soluble phase, so that the reliable simulation of P movement and uptake requires that the concns. of soluble P forms be explicitly represented in math. models. To represent soluble P concns. under dynamic boundary conditions, a convective-dispersive model of P transport has been coupled to a model of P transformation in which adsorption-desorption, precipitation-dissoln., and ion pairing are explicitly represented as concurrent equilibrium reactions. This model is used to explain the temporal and spatial distribution of P among soluble and resin-, NaHCO3-, NaOH-, and HCl-extractable fractions in soils following amendment with KH2PO4. Simulated redns. in soil pH following different P amendments caused solid-phase P in the model to be recovered more from resin- and NaOH-extractable forms and less from HCl-extractable forms as solution P concentration increased. These changes were consistent with those observed exptl. using a P fractionation procedure on a Malmo silt loam (Typic Cryoboralf [sic]) following its equilibration with 0 to 512 mg L-1 of KH2PO4 and following its irrigation for 205 d with 50 mg L-1 of KH2PO4. Simulated displacement of cation coppts. from exchange sites allowed the model to reproduce the temporal and spatial patterns of water- and HCl-extractable P in resin columns of different cation-exchange capacities following a KH2PO4 surface amendment. The results of model testing suggest that changes in soluble P concns. following P amendments may be represented from concurrent equilibrium reactions for adsorption-desorption, precipitation-dissoln., and ion pairing. However, the rate at which these reactions proceed remains uncertain.

IT 1306-06-5, Hydroxyapatite 21063-37-6, Monetite
(precipitation in phosphorus transformation in soils)

RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 21063-37-6 HCAPLUS
CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

● Ca

CC 19-3 (Fertilizers, Soils, and Plant Nutrition)
IT 1306-06-5, Hydroxyapatite 13824-49-2, Strengite
13824-50-5, Variscite 21063-37-6, Monetite
(precipitation in phosphorus transformation in soils)
OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 28 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:247483 HCAPLUS Full-text
DOCUMENT NUMBER: 126:227215
ORIGINAL REFERENCE NO.: 126:43907a,43910a
TITLE: Manufacture of platy hydroxyapatite large crystals
INVENTOR(S): Wakana, Minoru; Matsuda, Nobuyuki; Kaji, Fumihiro
PATENT ASSIGNEE(S): Taihei Chemical Industrial Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09040408	A	19970210	JP 1995-192209 <--	19950727
JP 3641298	B2	20050420		
PRIORITY APPLN. INFO.:			JP 1995-192209 <--	19950727

ED Entered STN: 16 Apr 1997
AB The crystals are manufactured by hot-holding aqueous dispersions of platy CaHPO4.2H2O powders and CaCO3 particles having average grain size ≤5 μm at 40-70°. The process in moderate condition without using special apparatus gives the crystals for various uses.
IT 1306-06-5P, Hydroxyapatite
(platy hydroxyapatite large crystal manufacture from Ca phosphate and Ca carbonate in moderate condition)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C01B0025-32 [ICM,6]; A61L0027-00 [ICS,6]; A61K0007-16 [ICS,6]
IPCR A61L0027-00 [I,C*]; A61L0027-00 [I,A]; A61K0008-00 [I,C*]; A61K0008-00 [I,A]; A61K0008-19 [I,C*]; A61K0008-24 [I,A]; A61Q0011-00 [I,C*]; A61Q0011-00 [I,A]; C01B0025-00 [I,C*]; C01B0025-32 [I,A]
CC 49-4 (Industrial Inorganic Chemicals)
ST platy hydroxyapatite large crystal manuf; calcium phosphate carbonate reaction hydroxyapatie manuf
IT 1306-06-5P, Hydroxyapatite
(platy hydroxyapatite large crystal manufacture from Ca phosphate and Ca carbonate in moderate condition)

IT 471-34-1, Calcium carbonate, reactions 7789-77-7
(platy hydroxyapatite large crystal manufacture from Ca phosphate and Ca carbonate in moderate condition)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L64 ANSWER 29 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:187124 HCAPLUS Full-text
DOCUMENT NUMBER: 126:186892
ORIGINAL REFERENCE NO.: 126:36083a,36086a
TITLE: Additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compositions
INVENTOR(S): Nishioka, Hidehiko; Hanazaki, Minoru; Minayoshi, Shiro; Takiyama, Shigeo; Aoyama, Mitsunobu
PATENT ASSIGNEE(S): Maruo Calcium Company Limited, Japan
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9703119	A1	19970130	WO 1996-JP1894 <--	19960709
W: CN, JP, KR, US RW: DE, FR, GB, LU				
EP 838494	A1	19980429	EP 1996-922262 <--	19960709
EP 838494	B1	20030528		
R: DE, FR, GB, LU				
CN 1196071	A	19981014	CN 1996-196897 <--	19960709
CN 1138825	C	20040218		
US 5844022	A	19981201	US 1998-983291 <--	19980112
US 5976687	A	19991102	US 1998-95512 <--	19980611

PRIORITY APPLN. INFO.:			JP 1995-200504 <--	A 19950712
			WO 1996-JP1894 <--	W 19960709
			US 1998-983291 <--	A3 19980112

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
ED Entered STN: 21 Mar 1997
AB An additive for various synthetic resins composed of particles surface-coated with at least 5 weight% of petaloid porous hydroxyapatite having the chemical formula Ca5(PO4)3(OH), the size of which is satisfied with the following equations: (a) 0.1 ≤ dx1 ≤ 20 (μm); (b) 1 ≤ α ≤ 5, α = d50/dx1; (c) 0 ≤ β ≤ 2, β = (d90 - d10)/d50; (d) 40/dx1 ≤ Sw1 ≤ 400, where dx1 is the average particle diameter (μm), α is the dispersion coefficient, d50 is the 50% average particle diameter (. mu.m), β is sharpness, d90 is the accumulated 90% particle diameter of particles passed through a sieve (μm), d10 is the accumulated 10% particle diameter of particles passed through a sieve (μm), Sw1 is the BET sp. surface area by nitrogen adsorption (m2/g). Application of the above additive to a polyolefin film was effective in preventing the film from blocking and the film showed excellent transparency and

scratch resistance. A polyester film added with the additive had excellent slip character and wear resistance and the coarse protuberances were reduced. Thus a CaCO3 aqueous dispersion (average particle dimeter 0.48 .mu .m, solid fraction 8%) prepared by treating the Ca(OH)2 aqueous suspension with H2CO3 gas was mixed with a H3PO4 dilute aqueous solution (solid fraction 5%) at Ca/P ratio of 1.86, stirred, condensed, then spray-dried to give petaloid porous particles with 90% hydroxyapatite. The particles prepared were blended with polypropylene resin and extruded, molded to a test film. IPCI C08K0009-02 [ICM,6]; C08K0009-00 [ICM,6,C*]; C08L0101-00 [ICS,6]

IPCR C08K0009-00 [I,C*]; C08K0009-02 [I,A]

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 40

ST petaloid porous hydroxyapatite resin additive prepn; polyolefin additive petaloid porous hydroxyapatite; polyester additive petaloid porous hydroxyapatite; calcium phosphate hydroxide hydroxyapatite resin additive; particle size calcium phosphate hydroxide hydroxyapatite

IT Particle size
(additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with excellent transparency and scratch resistance)

IT Polyester fibers, properties
Polyesters, properties
Polyolefins
(additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with excellent transparency and scratch resistance)

IT Tannins
(deodorizing agent; additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with deodorizing property)

IT 9003-07-0, Polypropylene
(additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with excellent transparency and scratch resistance)

IT 12167-74-7P, Calcium hydroxide phosphate (Ca5(OH)(PO4)3)
(additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with fragrance)

IT 9002-86-2, Poly(vinyl chloride)
(additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with fragrance)

IT 25038-59-9, Poly(ethylene terephthalate), properties
(optional fiber; additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with excellent transparency and scratch resistance)

IT 141-97-9, Ethyl acetoacetate
(perfume; additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with fragrance)

IT 471-34-1, Calcium carbonate, reactions 7664-38-2, Phosphoric acid, reactions 7757-93-9, Dicalcium phosphate 7758-23-8
(starting material; additive coated with petaloid porous hydroxyapatite for synthetic resins and synthetic resin compns. with excellent transparency and scratch resistance)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 30 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:496983 HCAPLUS Full-text
DOCUMENT NUMBER: 125:123180
ORIGINAL REFERENCE NO.: 125:22933a,22936a
TITLE: Supporting calcium phosphate -based ceramic particles on porous supports for tap water purification
INVENTOR(S): Yasuda, Motoi; Kitazaki, Satoshi; Hatono, Hironori; Kitamura, Masaki; Imasaka, Takao
PATENT ASSIGNEE(S): Toto Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08141390	A	19960604	JP 1994-305677 <--	19941116
PRIORITY APPLN. INFO.:			JP 1994-305677 <--	19941116

ED Entered STN: 20 Aug 1996
AB The process comprises passing slurries of Ca phosphate-based ceramic particles dispersed in H2O through porous materials. Preferably, the ceramic particles have average particle size ≤10 μm. The process provides efficient removal of Pb from tap water, etc.
IT 1306-06-5, Hydroxyapatite
(supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI B01J0020-04 [ICM,6]; B01D0061-00 [ICS,6]; B01J0020-28 [ICS,6]; C02F0001-44 [ICS,6]
IPCR B01D0061-00 [I,C*]; B01D0061-00 [I,A]; B01J0020-04 [I,C*]; B01J0020-04 [I,A]; B01J0020-28 [I,C*]; B01J0020-28 [I,A]; C02F0001-44 [I,C*]; C02F0001-44 [I,A]
CC 61-5 (Water)
ST calcium phosphate lead removal water; porous filter hydroxyapatite water purifn
IT Charcoal
(bone, supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)
IT Polyolefin fibers
(ethylene, membranes, hollow-fiber; supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)
IT Water purification
(filtration, supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)

IT Filters and Filtering materials
(membranes, hollow-fiber, supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)
IT 9002-88-4, Polyethylene
(hollow-fiber membranes; supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)
IT 1306-06-5, Hydroxyapatite 10103-46-5, Calcium phosphate
(supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)
IT 7439-92-1, Lead, processes
(supporting Ca phosphate-based ceramic particles on porous materials for removal of Pb from water)

L64 ANSWER 31 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:663519 HCAPLUS Full-text
DOCUMENT NUMBER: 121:263519
ORIGINAL REFERENCE NO.: 121:47951a,47954a
TITLE: Fast disintegrating controlled release tablets from coated particles
AUTHOR(S): Lehmann, K.; Petereit, H. -U.; Dreher, D.
CORPORATE SOURCE: R & D Department/Application Technology, Rohm GmbH, Darmstadt, Germany
SOURCE: Drugs Made in Germany (1994), 37(2), 53-60
CODEN: DRMGAS; ISSN: 0012-6683
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 26 Nov 1994
AB Small particles such as crystals, granules and pellets of a particle size in the range of 0.3-1.2 mm were coated with aqueous dispersions of methacrylic acid and methacrylic ester copolymers (Eudragit RL 30 D, RS 30 D, L 30 D-55 and NE 30 D) for taste masking, resistance to gastric fluid and diffusion controlled sustained release properties and compressed into fast disintegrating tablets. Admixt. of 25-50% of tabletting excipients as microcryst. cellulose, sorbitol, starch and Na carboxymethyl starch as fillers, and disintegrants were necessary to get fast disintegration of the tablets; the function of these substances was also filling of the interspace, as well as separation and protection of the coated particles during compression. Some damage of coatings were observed with brittle coating materials when elongation at break was around 20% only. More flexible films of more than 75% elongation of break withstand mech. stress of compression so that the release pattern of disintegrating tablets was very similar or nearly the same as for the uncompressed particles. Examples were given for taste masking of paracetamol, sustained release preparation of potassium chloride and theophylline and also enteric coated acetylsalicylic acid and indomethacin. As an alternative to fill coated particles in capsules such fast disintegrating tablets have the advantage of yielding higher drug concns., of being safe against criminal manipulations, of being dividable and less expensive in production
CC 63-6 (Pharmaceuticals)
ST controlled release tablet coated particle
IT Particle size
(fast disintegrating controlled release tablets from coated particles)
IT Silica gel, biological studies
(fast disintegrating controlled release tablets from coated particles)
IT Pharmaceutical dosage forms
(tablets, controlled-release, fast disintegrating controlled

release tablets from coated particles)
IT 50-70-4, Sorbitol, biological studies 50-78-2, Acetylsalicylic acid 53-86-1, Indomethacin 58-55-9, Theophylline, biological studies 77-89-4, Acetyl triethyl citrate 77-93-0, Triethyl citrate 103-90-2, Paracetamol 7447-40-7, Potassium chloride, biological studies 7757-93-9, Calcium hydrogen phosphate 9004-34-6, Cellulose, biological studies 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies 9005-65-6, Polysorbate 80 9010-88-2, Eudragit NE30D 9063-38-1, Sodium carboxymethyl starch 14807-96-6, Talcum, biological studies 25212-88-8 25322-68-3, PEG 31566-31-1, Glycerol monostearate 33434-24-1, Eudragit RS30D 107950-49-2, Eudragit RL30D
(fast disintegrating controlled release tablets from coated particles)
OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L64 ANSWER 32 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:418124 HCAPLUS Full-text
DOCUMENT NUMBER: 121:18124
ORIGINAL REFERENCE NO.: 121:3331a,3334a
TITLE: Preparation of apatite-coated metal implants
PATENT ASSIGNEE(S): Electro Chemical Engineering GmbH, Switz.
SOURCE: Ger., 4 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4303575	C1	19940414	DE 1993-4303575 <--	19930208
PRIORITY APPLN. INFO.:			DE 1993-4303575 <--	19930208

ED Entered STN: 09 Jul 1994
AB A metal implant is coated with apatite by a plasma-chemical reaction induced by a.c. at 30-90° and 5-60 A/dm2 in an aqueous dispersion of hydroxylapatite and/or fluorapatite (particle size 1-100 μm, 20-300 g/L) in 0.05-0.2M alkali metal or alkaline earth salt solution buffered with H3PO4 to pH 3. Application of this procedure to a hip joint prosthesis of TiAl6V4 alloy (50 Hz, 15 A/dm2, 50°, 0.07M Ca(H2PO4)2, 60 g hydroxylapatite/L, particle size 1-45 μm, 30 min) produced a coating 16 . mu.m thick with an adhesive strength of 8 MPa and a purity of 95%.
IT 1306-05-4, Fluoroapatite 1306-06-5, Hydroxylapatite
(metallic prosthesis coating with, by plasma chemical)
RN 1306-05-4 HCAPLUS
CN Fluorapatite (Ca5F(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
F	1	14762-94-8
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI A61L0027-00 [ICM,5]; C25D0005-00 [ICS,5]; A61K0006-06 [ICS,5]; A61K0006-02 [ICS,5,C*]; A61C0008-00 [ICS,5]; A61F0002-28 [ICS,5]; A61F0002-30 [ICS,5]
IPCR A61C0013-00 [I,C*]; A61C0013-00 [I,A]; A61F0002-00 [N,C*]; A61F0002-00 [N,A]; A61F0002-30 [I,C*]; A61F0002-30 [I,A]; A61F0002-32 [N,C*]; A61F0002-34 [N,A]; A61F0002-36 [N,C*]; A61F0002-36 [N,A]; A61L0027-00 [I,C*]; A61L0027-32 [I,A]
CC 63-7 (Pharmaceuticals)
ST apatite coating prosthesis; hydroxylapatite coating prosthesis
IT Apatite-group minerals
(metallic prosthesis coating with, by plasma chemical)
IT Dental materials and appliances
Prosthetic materials and Prosthetics
(implants, metal, coating of, with apatite by plasma chemical)
IT Coating process
(plasma, of metallic prosthesis with apatite, in aqueous dispersion)
IT Alkali metals, uses
Alkaline earth compounds
(salts, metallic prosthesis coating with apatite by plasma chemical in aqueous solution of)
IT 7664-38-2, Phosphoric acid, uses
(metallic prosthesis coating with apatite by plasma chemical in aqueous solution buffered with)
IT 7758-23-8, Calcium dihydrogen phosphate
(metallic prosthesis coating with apatite by plasma chemical in aqueous solution of)
IT 1306-05-4, Fluoroapatite 1306-06-5, Hydroxylapatite
(metallic prosthesis coating with, by plasma chemical)
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 33 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:79764 HCAPLUS Full-text
DOCUMENT NUMBER: 120:79764
ORIGINAL REFERENCE NO.: 120:14313a,14316a
TITLE: Deodorant nonwoven webs and their manufacture
INVENTOR(S): Futaki, Koji; Hirayama, Yasuhiko; Ogawa, Tetsuro; Hiraide, Tsuneo
PATENT ASSIGNEE(S): Asahi Optical Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05222693	A	19930831	JP 1992-268475 <--	19921007
JP 2722300	B2	19980304		
PRIORITY APPLN. INFO.:			JP 1991-347574 <--	A1 19911028

ED Entered STN: 19 Feb 1994

AB The title webs, with good permeability, flexibility and tear resistance, useful for disposable cloths, filter, cleaning sheets, etc. (no data) are manufactured by wet forming as usual, and applying an aqueous dispersion containing Ca phosphate compds. which have the Ca/P molar ratio 1.0-2.0, water-soluble binders and polymeric dispersants to the webs during wet forming or by surface coating. A dispersion containing porous hydroxyapatite particles (Ca/P molar ratio 1.67, average size 0.05 μm, sp. surface area 80 m2/g) 8, ammonium polycarbonate dispersant 0.08, poly(vinyl alc.) binder 0.8 and water 91.12 parts was applied by coating on the surface of nonwoven polyester fiber webs.

IT 1306-06-5P, Hydroxyapatite
(supported on nonwovens, manufacture and properties and uses of)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI D21H0017-63 [ICM,5]; D21H0017-00 [ICM,5,C*]; A61L0002-16 [ICS,5]; A61L0009-00 [ICS,5]; B01F0017-14 [ICS,5]; D06M0015-00 [ICS,5]; D06M0023-08 [ICS,5]

IPCR A61L0002-16 [I,C*]; A61L0002-16 [I,A]; A61L0009-00 [I,C*]; A61L0009-00 [I,A]; B01F0017-14 [I,C*]; B01F0017-14 [I,A]; D06M0013-00 [I,C*]; D06M0013-02 [I,A]; D06M0013-192 [I,A]; D06M0015-00 [I,C*]; D06M0015-00 [I,A]; D06M0023-00 [I,C*]; D06M0023-00 [I,A]; D06M0023-08 [I,C*]; D06M0023-08 [I,A]; D21H0017-00 [I,C*]; D21H0017-63 [I,A]

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 40

ST nonwoven web calcium phosphate supporting; hydroxyapatite supported paper deodoring web

IT Apatite-group minerals
(supported on nonwovens, manufacture and properties and uses of)

IT 1306-01-0P, Tetracalcium phosphate 1306-06-5P, Hydroxyapatite 7758-87-4P, Tricalcium phosphate
(supported on nonwovens, manufacture and properties and uses of)

L64 ANSWER 34 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:219870 HCAPLUS Full-text

DOCUMENT NUMBER: 118:219870

ORIGINAL REFERENCE NO.: 118:37773a,37776a

TITLE: Coating material and method for drug dosage forms

INVENTOR(S): Grabowski, Sven; Wendel, Kurt; Kah-Helbig, Astrid

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4133192	A1	19930408	DE 1991-4133192 <--	19911007
EP 536595	A1	19930414	EP 1992-116324 <--	19920924
EP 536595	B1	19950705		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
ES 2073837	T3	19950816	ES 1992-116324 <--	19920924
CA 2079860	A1	19930408	CA 1992-2079860 <--	19921005
JP 05194198	A	19930803	JP 1992-267043 <--	19921006
US 5326586	A	19940705	US 1992-957375 <--	19921007

PRIORITY APPLN. INFO.: DE 1991-4133192 A 19911007 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
ED Entered STN: 29 May 1993
AB Emulsion polymerization of an unsatd. monomer (1 part by weight) with a free radical initiator in the presence of saccharified starch (mol. weight 2500-25,000) 0.1-2 parts and a surfactant 0-5 weight%, drying to a powder, and redispersing in water provides a latex binder for coating drug dosage forms. The latex is applied and water is evaporated at a temperature which causes the latex particles to form a film. Thus, 125 g theophylline (particle size 0.2-0.7 mm) and 75 g $CaHPO_4$ were mixed, moistened with 20.8 g water, and granulated with a 30% aqueous dispersion of an Et acrylate-Me methacrylate copolymer prepared by emulsion polymerization in the presence of 20 weight% maltodextrin. The granules were dried, sieved, and compressed into 215-mg delayed-release tablets.
IPCI A61K0009-32 [ICM,5]; A61K0009-36 [ICS,5]; A61K0009-30 [ICS,5,C*]; A61K0009-22 [ICS,5]
IPCR A61K0009-20 [I,C*]; A61K0009-20 [I,A]; A61K0009-22 [I,C*]; A61K0009-22 [I,A]; A61K0009-28 [I,C*]; A61K0009-28 [I,A]; A61K0009-30 [I,C*]; A61K0009-32 [I,A]; A61K0009-36 [I,A]; A61K0047-30 [I,C*]; A61K0047-30 [I,A]
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 37
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L64 ANSWER 35 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1987:449500 HCAPLUS Full-text
DOCUMENT NUMBER: 107:49500
ORIGINAL REFERENCE NO.: 107:8071a,8074a
TITLE: Electrophotographic toners
INVENTOR(S): Hoshino, Yukihisa; Kudo, Takeo
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61200549	A	19860905	JP 1985-40035 <--	19850228
JP 04031382	B	19920526		
PRIORITY APPLN. INFO.:			JP 1985-40035 <--	19850228

ED Entered STN: 08 Aug 1987
AB Electrophotog. toners with excellent fixing and offset-preventing properties contain polymers (as binders) with a weight-average mol. weight (.hivin.Mw) of 1,000-50,000 obtained by copolymg. 1-50 parts of large-mol.-weight monofunctional monomers having ethylenic double bonds at 1 end and 50-99 parts monomers copolymerizable with the double bonds. Benzene, diphenylethylene, and excess sec-BuLi were mixed, kept in Ar overnight, dried with AlLiH4, mixed with 1000 mL benzene and 0.04 g 1,1-diphenylethylene, then 1.5M sec-BuLi in cyclohexane was added dropwise, mixed with 6.0 mL (9.0 mmol) 1.5M sec-BuLi in cyclohexane, dried with CaH2, mixed with 83.2 g (0.8 mol) styrene, stirred 30 min at 40°, cooled to 20°, mixed with 1 mL liquid ethylene oxide (styryl anion → alkoxy anion; orange → colorless), heated to 40°, and mixed with 2 mL methacryloyl chloride. The reaction mixture was precipitated with 1000 mL MeOH, filtered, and dried under reduced pressure at room temperature to obtain 87.2 g of a reaction product (I; weight-average mol. weight 9300; number-average mol. weight 8500; degree of dispersion 1.09). Then, 750 mL water, 45 g Supertite 10 (hydroxyapatite, aqueous dispersion; from Nippon Kayaku Co., Ltd.), 4.5 g 1% aqueous Na dodecylbenzenesulfonate, 2.25 g 10% aqueous NaCl, 50 g I, 350 g styrene, 100 g Bu acrylate, and 15 g Bz2O2 were stirred 30 min at room temperature under N, and stirred 4 h at 90° and 2 h at 95° to obtain a polymer (II; beads; .hivin.Mw 155,000; number-average mol. weight 49,000; degree of dispersion 3.2; Tg 58°; softening point 77°). II 450, C black 40, Viscol 550P 10, and Oil Black BY 25 g were melt-kneaded and pulverized to obtain a toner (particle size 5-30μ; average particle size 14μ), 50 g of which was mixed with 950 g of an amorphous Fe oxide carrier to obtain a developer, which showed excellent fixing and offset-preventing properties.
IPCI G03G0009-08 [ICM,4]; C08F0299-00 [ICS,4]
IPCR G03G0009-08 [I,C*]; G03G0009-08 [I,A]; C08F0290-00 [I,C*]; C08F0290-00 [I,A]; C08F0299-00 [I,C*]; C08F0299-00 [I,A]; G03G0009-087 [I,C*]; G03G0009-087 [I,A]
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

L64 ANSWER 36 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER:	1987:134540 HCAPLUS Full-text
DOCUMENT NUMBER:	106:134540
ORIGINAL REFERENCE NO.:	106:21879a,21882a
TITLE:	High-performance liquid chromatography using novel square tile-shaped hydroxylapatite crystals as adsorbent
AUTHOR(S):	Kawasaki, Tsutomu; Kobayashi, Wataru
CORPORATE SOURCE:	Chromatogr. Res. Lab., Koken Co. Ltd., Tokyo, 161, Japan
SOURCE:	Biochemistry International (1987), 14(1), 55-62 CODEN: BIINDF; ISSN: 0158-5231
DOCUMENT TYPE:	Journal
LANGUAGE:	English

ED Entered STN: 01 May 1987
AB High-performance liquid chromatog. using, as adsorbent, novel square tile-shaped hydroxylapatite crystals (with thickness of about 2 μm and diams. of 3-7 μm) has been developed. The chromatog. efficiencies of the novel hydroxylapatite packed columns are almost equal to those of the previously

developed spherical hydroxylapatite packed columns; high chromatog. resolns. can be obtained by using extremely reduced column lengths of 0.5-3 cm. Since both the square and the spherical hydroxylapatite have roughly the same particle size, the chromatog. efficiency can be determined by the particle size rather than the particle shape. This method was used to analyze proteins.

IT 21063-37-6P
(preparation and conversion into hydroxylapatite)
RN 21063-37-6 HCAPLUS
CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

Ca

IT 1306-06-5, Hydroxylapatite
(square tile-shaped, as adsorbent for HPLC of proteins)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

CC 9-3 (Biochemical Methods)
Section cross-reference(s): 66, 80
IT Albumins, analysis
Proteins, analysis
(chromatog. of, high-performance liquid, on square tile-shaped hydroxylapatite crystals)
IT Chromatography, column and liquid
(high-performance, of proteins, on square tile-shaped hydroxylapatite crystals)
IT Chromatography, column and liquid
(high-performance, stationary phases, square tile-shaped hydroxylapatite crystals as, for proteins)
IT 9001-63-2, Lysozyme 9007-43-6, Cytochrome c, analysis
(chromatog. of, high-performance liquid, on square tile-shaped hydroxylapatite crystals)
IT 21063-37-6P
(preparation and conversion into hydroxylapatite)
IT 1306-06-5, Hydroxylapatite
(square tile-shaped, as adsorbent for HPLC of proteins)

L64 ANSWER 37 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1987:128409 HCAPLUS Full-text
DOCUMENT NUMBER: 106:128409
ORIGINAL REFERENCE NO.: 106:20809a,20812a
TITLE: Multiple scattering in the EXAFS of calcium

phosphates
AUTHOR(S): Harries, J. E.; Hukins, D. W. L.; Hasnain, S. S.
CORPORATE SOURCE: Dep. Med. Biophys., Univ. Manchester, Manchester, M13 9PT, UK
SOURCE: Journal de Physique, Colloque (1986), (C8, Vol. 2), C8/603-C8/606
CODEN: JPQCAK; ISSN: 0449-1947
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 17 Apr 1987
AB Anal. of the EXAFS spectra of hydroxyapatite, brushite and monetite, recorded above the Ca K edge, requires the inclusion of multiple scattering by atoms at 0.37 nm, from Ca. If multiple scattering is not included, some variable parameters acquire phys. unreasonable values. Atomic radii never had to be varied by >0.01 nm from their values in the accepted crystal structures.
IT 1306-06-5 21063-37-6, Monetite
(EXAFS of, multiple scattering in)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 21063-37-6 HCAPLUS
CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

● Ca

CC 73-6 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 53
IT 1306-06-5 7757-93-9, Calcium phosphate (CaHPO4)
7789-77-7 12167-74-7 14567-92-1, Brushite 21063-37-6, Monetite
(EXAFS of, multiple scattering in)

L64 ANSWER 38 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1986:499079 HCAPLUS Full-text
DOCUMENT NUMBER: 105:99079
ORIGINAL REFERENCE NO.: 105:16019a,16022a
TITLE: Fibrous apatite material
INVENTOR(S): Fujii, Shigeo; Mori, Shoichi; Tabuchi, Jyoichi
PATENT ASSIGNEE(S): Toa Nenryo Kogyo K. K., Japan
SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 174827	A2	19860319	EP 1985-306409 <--	19850910
EP 174827	A3	19870819		
EP 174827	B1	19900711		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
JP 61174460	A	19860806	JP 1984-190413 <--	19840911
JP 05085665	B	19931208		
JP 61075817	A	19860418	JP 1984-193159 <--	19840914
JP 05085666	B	19931208		
JP 61106166	A	19860524	JP 1984-229283 <--	19841031
JP 63014988	B	19880402		
JP 61106167	A	19860524	JP 1984-229284 <--	19841031
JP 63014989	B	19880402		
JP 61201018	A	19860905	JP 1985-35262 <--	19850226
JP 02002974	B	19900122		
JP 61201019	A	19860905	JP 1985-35263 <--	19850226
US 4659617	A	19870421	US 1985-773482 <--	19850906
CA 1261568	A1	19890926	CA 1985-493540 <--	19851022
CN 86101136	A	19861001	CN 1986-101136 <--	19860225
CN 1011320	B	19910123		
PRIORITY APPLN. INFO.:			JP 1984-190413 A <--	19840911
			JP 1984-193159 A <--	19840914
			JP 1984-229283 A <--	19841031
			JP 1984-229284 A <--	19841031
			JP 1985-35262 A <--	19850226
			JP 1985-35263 A <--	19850226

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 105:99079
ED Entered STN: 19 Sep 1986
AB Fibers with good workability and compatibility with living organisms are prepared by extruding aqueous dispersions of the apatites M10(ZO4)6X2 (M = Ca, Ba, Mg, Sr, Pb, Cd, Fe, etc.; Z = P, As, V, C, etc.; X = F, Cl, OH, etc.) containing binders through spinnerets, drawing the dispersion into fibers by high-velocity air, and drying by heat. Thus, an aqueous dispersion of 11% pullulan and 17% hydroxyapatite (particle size 5-80 mm) was spun through 0.3-mm spinnerets at 1.4 kg/cm2 while air was blown at 250 m/s through gaps, and the fiber stream ws heated from both sides at 400° by IR to give cottony fibers which were heated at 50°/h to 1100° and calcined 1 h to give hydroxyapatite fibers with average diameter 5 μ and average length 50 mm.

IT 1306-06-5
(fibers, compatible with living organisms, spinning of)
RN 1306-06-5 HCAPLUS
CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI D01F0009-08 [ICM,4]; A61F0002-00 [ICA,4]
IPCR A61F0002-00 [N,C*]; A61F0002-00 [N,A]; A61L0027-00 [I,C*]; A61L0027-12 [I,A]; C12N0001-00 [I,C*]; C12N0001-00 [I,A]; D01F0009-08 [I,C*]; D01F0009-08 [I,A]
CC 40-2 (Textiles)
Section cross-reference(s): 49
ST apatite fiber spinning; pullulan binder apatite fiber; hydroxyapatite fiber manuf
IT Binding materials
(pullulan and poly(vinylalc.) for hydroxyapatite fiber spinning)
IT Synthetic fibers
(hydroxylapatite, compatible with living organisms, spinning of)
IT 9002-89-5 9057-02-7
(binders, for hydroxyapatite in fiber spinning)
IT 1306-06-5
(fibers, compatible with living organisms, spinning of)
IT 10103-46-5
(fillers, for hydroxyapatite fibers)
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L64 ANSWER 39 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:11844 HCAPLUS Full-text
DOCUMENT NUMBER: 102:11844
ORIGINAL REFERENCE NO.: 102:1945a,1948a
TITLE: Artificial dephosphorizer and its use
PATENT ASSIGNEE(S): Kurita Water Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59156488	A	19840905	JP 1983-31579 <--	19830226
PRIORITY APPLN. INFO.:			JP 1983-31579 <--	19830226

ED Entered STN: 12 Jan 1985
AB An artificial dephosphorizer is a CaCO3-containing substrate coated with Ca3(PO4)2-containing powders. Water containing PO43- is contacted with the artificial dephosphorizer at pH ≤6 in the presence of Ca2+ for PO43- removal. Thus, a dephosphorizer was prepared by passing an aqueous dispersion of hydroxyapatite (size ≤0.1 mm) through a column packed with coral fossil (size

0.5-1.0 mm; P 0.22 mg/g). Water (P 2 mg/L), adjusted with aqueous CaCl2 and aqueous NaOH to Ca2+ 45 mg/L and pH 8.8-9.0, was passed through the column. Average P content in the treated water in 30-day continuous operation was 0.48 mg/L vs. 1.75 mg/L (in 10-day operation) when coral fossil was not treated with hydroxyapatite.

IT 1306-05-4 1306-06-5
(crystallization seed, in phosphorus removal from wastewater)

RN 1306-05-4 HCAPLUS

CN Fluorapatite (Ca5F(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
F	1	14762-94-8
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

IPCI C02F0001-58

IPCR C02F0001-58 [I,C*]; C02F0001-58 [I,A]

CC 60-3 (Waste Treatment and Disposal)
Section cross-reference(s): 61

ST dephosphorization water filtration crystn; hydroxyapatite dephosphorizer crystn; phosphorus removal crystn water treatment; calcium phosphate crystn seed dephosphorization

IT 1306-05-4 1306-06-5 7758-87-4
(crystallization seed, in phosphorus removal from wastewater)

L64 ANSWER 40 OF 40 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1980:54596 HCAPLUS Full-text

DOCUMENT NUMBER: 92:54596

ORIGINAL REFERENCE NO.: 92:9027a,9030a

TITLE: Irradiation effects in the electron microprobe quantitation of mineralized tissues

AUTHOR(S): Edie, John W.; Glick, Paul L.

CORPORATE SOURCE: Coll. Dent., Univ. Iowa, Iowa City, IA, 52242, USA

SOURCE: Journal of Microscopy (Oxford, United Kingdom) (1979), 117(2), 285-96
CODEN: JMICAR; ISSN: 0022-2720

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

AB The accuracy of absolute quantitation within thick, mineralized tissue specimens (bone, enamel, dentin) was influenced by count rate variations of characteristic x-rays during electron microprobe anal. The variations occurred for electron doses .gtorsim.10-10 C/. mu.m2 and were primarily dependent upon the light element fraction within the irradiated volume Specimen preparation procedures affected both count rate dynamics and interpretation of microanal. results. X-ray intensity data acquired at initial electron exposure and utilized in standard matrix correction schemes projected valid elemental concns. for known Ca compds. over wide ranges of specimen d. Measurement error

approached 2-3% for the major elemental constituents in mineralized tissues, but only with appropriate control or interpretation of electron irradiation phenomena.

IT 1306-06-5 21063-37-6
(electron microprobe anal. of)

RN 1306-06-5 HCAPLUS

CN Hydroxylapatite (Ca5(OH)(PO4)3) (CA INDEX NAME)

Component	Ratio	Component Registry Number
HO	1	14280-30-9
O4P	3	14265-44-2
Ca	5	7440-70-2

RN 21063-37-6 HCAPLUS

CN Monetite (Ca(HPO4)) (9CI) (CA INDEX NAME)

CC 9-5 (Biochemical Methods)

IT 136-51-6 137-08-6 563-72-4 814-80-2 824-35-1 1302-54-1
1306-05-4 1306-06-5 1592-23-0 4075-81-4 7789-79-9
13767-12-9 14358-97-5 16809-88-4 21063-37-6
29039-00-7
(electron microprobe anal. of)

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=>  d his nofile

     (FILE 'HOME' ENTERED AT 07:45:41 ON 30 JUN 2010)

     FILE 'HCAPLUS' ENTERED AT 07:45:52 ON 30 JUN 2010
L1             1 SEA SPE=ON  ABB=ON  PLU=ON  US20060239884/PN
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 07:46:02 ON 30 JUN 2010
L2             6 SEA SPE=ON  ABB=ON  PLU=ON  (10035-04-8/BI OR 1306-06-5/BI
                 OR 14567-92-1/BI OR 21063-37-6/BI OR 7758-29-4/BI OR
                 7783-28-0/BI)
L3             1 SEA SPE=ON  ABB=ON  PLU=ON  1306-06-5/RN
L4             1 SEA SPE=ON  ABB=ON  PLU=ON  21063-37-6/RN

     FILE 'HCAPLUS' ENTERED AT 07:49:24 ON 30 JUN 2010
L5         27167 SEA SPE=ON  ABB=ON  PLU=ON  L3
L6           221 SEA SPE=ON  ABB=ON  PLU=ON  L4
L7           132 SEA SPE=ON  ABB=ON  PLU=ON  L5 AND L6
L8             1 SEA SPE=ON  ABB=ON  PLU=ON  L7 AND L1
L9            10 SEA SPE=ON  ABB=ON  PLU=ON  L7 AND DISPERS?
L10              QUE SPE=ON  ABB=ON  PLU=ON  MU OR MICRON OR MICROMETER  OR
                 MICRO(W)METER OR NANOMETER OR NANO(W)METER OR  NM OR MM
L11           24 SEA SPE=ON  ABB=ON  PLU=ON  L7 AND L10
L12           30 SEA SPE=ON  ABB=ON  PLU=ON  L9 OR L11
L13              QUE SPE=ON  ABB=ON  PLU=ON  PLATELET? OR PLATE# OR PLATE
                 LIKE# OR GRAIN# OR GRANULAR# OR RECTANGULAR#
L14           17 SEA SPE=ON  ABB=ON  PLU=ON  L7 AND L13
L15           54 SEA SPE=ON  ABB=ON  PLU=ON  L7 AND CRYSTAL?
L16           14 SEA SPE=ON  ABB=ON  PLU=ON  L15 AND L10

     FILE 'REGISTRY' ENTERED AT 07:56:31 ON 30 JUN 2010
                 E   14567-92-1/RN
L17            1 SEA SPE=ON  ABB=ON  PLU=ON  14567-92-1/RN
                 E APATITE/CN
L18            4 SEA SPE=ON  ABB=ON  PLU=ON  APATITE/CN


     FILE 'HCAPLUS' ENTERED AT 07:58:11 ON 30 JUN 2010
L19          908 SEA SPE=ON  ABB=ON  PLU=ON  L17
L20        30990 SEA SPE=ON  ABB=ON  PLU=ON  L18
L21          185 SEA SPE=ON  ABB=ON  PLU=ON  (L19 OR L20) AND L6
L22           21 SEA SPE=ON  ABB=ON  PLU=ON  L21 AND L13
L23            8 SEA SPE=ON  ABB=ON  PLU=ON  L22 AND L10
L24            3 SEA SPE=ON  ABB=ON  PLU=ON  L22 AND LENGTH?
L25            8 SEA SPE=ON  ABB=ON  PLU=ON  L22 AND SIZE#
L26            4 SEA SPE=ON  ABB=ON  PLU=ON  L22 AND DISPERS?
L27           39 SEA SPE=ON  ABB=ON  PLU=ON  L12 OR L14 OR L16 OR (L23 OR
                 L24 OR L25 OR L26)
L28            3 SEA SPE=ON  ABB=ON  PLU=ON  L27 AND CPS/RL
L29            5 SEA SPE=ON  ABB=ON  PLU=ON  L7 AND CPS/RL
L30              QUE SPE=ON  ABB=ON  PLU=ON  PARTICL? OR MICROPARTICL? OR
                 PARTICULAT? OR DUST? OR GRIT? OR GRAIN# OR GRANUL? OR
                 POWDER? OR SOOT? OR SMUT? OR FINES# OR PRILL? OR FLAKE# OR
                 PELLET
L31           93 SEA SPE=ON  ABB=ON  PLU=ON  L6 AND L30
L32            4 SEA SPE=ON  ABB=ON  PLU=ON  L31 AND DISPERS?
L33              QUE SPE=ON  ABB=ON  PLU=ON  CALCIUM PHOSPHATE#
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L34		QUE SPE=ON ABB=ON PLU=ON HYDROXYLAPATITE# OR CALCIUM DIHYDROGEN PHOSPHATE# OR CALCIUM HYDROGEN PHOSPHATE# OR TRICALCIUM PHOSPHATE# OR HYDROXYAPATITE# OR MONETITE# OR CAHPO4 OR APATITE# OR BRUSHITE#
L35	93	SEA SPE=ON ABB=ON PLU=ON L34 AND AQUEOUS DISPERS?
L36	43	SEA SPE=ON ABB=ON PLU=ON L35 AND L10
L37	19	SEA SPE=ON ABB=ON PLU=ON L36 AND (LENGTH? OR SIZE#)
L38	10	SEA SPE=ON ABB=ON PLU=ON L37 AND ((L5 OR L6) OR (L19 OR L20))
L39	19	SEA SPE=ON ABB=ON PLU=ON (L37 OR L38)
L40	19	SEA SPE=ON ABB=ON PLU=ON L39 AND L30
L41	7	SEA SPE=ON ABB=ON PLU=ON L40 AND L33
L42	6752	SEA SPE=ON ABB=ON PLU=ON ((L5 OR L6) OR (L19 OR L20)) AND (CALCIUM PHOSPHATE# OR CALCIUMPHOSPHATE#)
L43	1414	SEA SPE=ON ABB=ON PLU=ON L42 AND L10
L44	876	SEA SPE=ON ABB=ON PLU=ON L43 AND (L13 OR L30)
L45	6	SEA SPE=ON ABB=ON PLU=ON L44 AND AQUEOUS DISPERS?
L46	121	SEA SPE=ON ABB=ON PLU=ON L44 AND DISPERS?
L47	86	SEA SPE=ON ABB=ON PLU=ON L46 AND (LENGTH? OR SIZE#)
L48	42	SEA SPE=ON ABB=ON PLU=ON L47 AND (1840-2003)/PRY,AY,PY
L49	1	SEA SPE=ON ABB=ON PLU=ON L48 AND L1
L50	16	SEA SPE=ON ABB=ON PLU=ON L48 AND PROC/RL
L51	4	SEA SPE=ON ABB=ON PLU=ON L40 AND L48
L52	23	SEA SPE=ON ABB=ON PLU=ON L27 AND PROC/RL
L53	25	SEA SPE=ON ABB=ON PLU=ON L28 OR L29 OR L52
L54	11	SEA SPE=ON ABB=ON PLU=ON L53 AND (1840-2003)/PRY,AY,PY
L55	17	SEA SPE=ON ABB=ON PLU=ON L40 AND (1840-2003)/PRY,AY,PY
L56	40	SEA SPE=ON ABB=ON PLU=ON L50 OR L54 OR L55
L57	1	SEA SPE=ON ABB=ON PLU=ON L56 AND L1
L58	14	SEA SPE=ON ABB=ON PLU=ON L48 AND PEP/RL
L59	40	SEA SPE=ON ABB=ON PLU=ON L56 OR L58
L60	36	SEA SPE=ON ABB=ON PLU=ON L59 AND L10
L61	33	SEA SPE=ON ABB=ON PLU=ON L59 AND L30
L62	12	SEA SPE=ON ABB=ON PLU=ON L59 AND L13
L63	34	SEA SPE=ON ABB=ON PLU=ON L59 AND (LENGTH? OR SIZE#)
L64	40	SEA SPE=ON ABB=ON PLU=ON (L59 OR L60 OR L61 OR L62 OR L63)